JUN 30 1942

JUNE 27, 1942

Railway Age

Founded in 1856

More Work Per Locomotive

A WAR DEMAND THAT ROLLER BEARING EQUIPPED LOCOMOTIVES FULFILL. THE FOLLOWING A.A.R. REPORT SHOWS WHY.

		Locomotive Maintenance Costs (Labor and Material) Per Mile, Per Locomotive				Average Monthly Mileage Per Locomotive			
				Decreased Maintenance Costs of Roller Bearing Locomotives				Increased Miles Made By Roller Bearing Locomotives	
A.A.R. Key No.	Type Locomotive	Friction Bearings	Roller Bearings	Per Mile	Per Cent	Friction Bearings	Roller Bearings	Miles Per Month	Per Cent
3	4-6-4	$0.2232	$0.1733	$0.0499	22.4	9,859	11,849	1,990	20.18
3	4-8-4	------	------	------	----	11,128	13,740	2,612	23.47
6	2-10-4	$0.2695	$0.1756	$0.0939	34.84	2,030	6,368	4,338	213.60
6	4-8-4	$0.1762	$0.1161	$0.0601	34.11	6,038	9,820	3,782	62.64
18	4-8-4	$0.208	$0.139	$0.069	33.17	4,650	7,300	2,650	56.99
18	4-8-2	$0.155	$0.065	$0.09	58.07	6,150	14,000	7,850	127.6
33	2-8-8-2	$0.378	$0.205	$0.173	45.76	4,116	6,587	2,471	60.03

Above data from 1941 Report, page 49 of the "Report of Committee On Locomotive Construction" Mechanical Division, Association Of American Railroads. The Report is dated May 19, 1941 and the tabulation of the data is of December 1, 1940.

TRANSPORTATION LIBRARY

THE TIMKEN ROLLER BEARING COMPANY, CANTON, OHIO

TIMKEN

TRADE-MARK REG. U. S. PAT. OFF.

RAILWAY ROLLER BEARINGS

WE'LL WIN

By Taking Full Advantage of NEW TECHNICAL DEVELOPMENTS

IT is imperative that all cars be loaded to capacity, even with perishables. That this can be done has been proved over a long period covering thousands of car loadings.

Refrigerator cars equipped with Preco Air Circulating Fans do the job. Increases in load run up to 66%. Refrigeration, Ventilation and Heater Services are greatly improved.

It Helps the Railroads Help the Nation Win the War

★ ★ ★

PACIFIC RAILWAY EQUIPMENT CO.

960 East 61st Street
LOS ANGELES, CALIFORNIA

Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 112, No. 26.

An Open Letter

To Railroad Executives

on the

Critical Scrap Shortage

GENTLEMEN:

Much has been said and done about the great need for more scrap to keep the steel mills running, but do you men who have control of America's railroad systems fully realize the gravity of the situation?

The steel industry is hoping to produce 85 million tons or more during 1942. To make this amount of steel will require a minimum of 35 to 40 million tons of scrap iron. We used to figure 55% scrap to 45% pig iron. Now we are using less scrap and more pig iron, but with blast furnaces running 24 hours a day producing all the pig iron possible the only way we can increase our production is to get more scrap. We must not only get enough scrap to carry on this summer, but we must build up a backlog that will carry us through the winter.

Sometime ago we made a drive to clean up scrap on our own plant and secured a substantial tonnage. However, I was not satisfied and six months later authorized divisional managers to junk everything that they did not absolutely need in the operation of the business. This second check produced more than double the first cleanup. I tell this story because I believe the same situation may exist on your properties.

I urge you to have your railroad systems rechecked, paying particular attention to shops, stores, water stations, power plants, unused structures, obsolete equipment and machinery, abandoned track, etc.

In time of war it is inconceivable to me that anyone with the authority would not act at once. Our boys at the front need steel with which to fight, need steel for protection. Your scrap steel will help save their lives and help win this war more quickly. So I urge you not to hold back. Scrap it now—tomorrow may be to late.

Sincerely,

W. Sykes

W. Sykes, President

INLAND STEEL CO.

38 South Dearborn Street, Chicago, Illinois

SHEETS · STRIP · TIN PLATE · BARS · PLATES · FLOOR PLATE · STRUCTURALS · PILING
RAILS · TRACK ACCESSORIES · REINFORCING BARS

Here's Why You Should

PLAN MAINTENANCE A

1 ***Far more time is required to obtain parts—especially parts requiring critical materials.***

2 ***Capacity for manufacturing parts is limited.***

3 ***Parts are wearing more rapidly—in direct proportion to the mileage operated.***

4 ***To keep Victory Traffic rolling, a steady supply of parts is a wartime "must."***

FOR these urgent reasons you should make commitments now for the replacement parts you will need a year from now. Then your requirements can be definitely scheduled along with other essential war equipment, for later delivery of parts as you need them. Call on your Alco-G.E. representative for assistance in estimating your requirements.

Protect Yourself for Emergencies

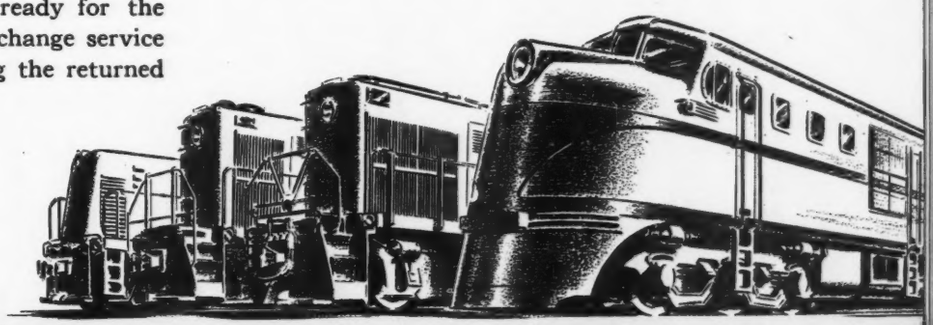
Long-range planning of maintenance needs is imperative because stocks are being limited as a result of the war effort. You cannot depend on rush shipments for normal replacements. Unless day-to-day requirements are ordered farther ahead, rush shipments *for emergencies* will be jeopardized.

You Command "MINUTE-MAN" SERVICE in 104 Cities!

Alco and G.E. have moved quickly to assure continued, fast, reliable service on maintenance parts during the war emergency. Complete stocks of parts are conveniently available in strategic locations. You can draw on any or all of these stocks for any parts you need in a hurry. By eliminating duplication of stock, this plan conserves vital materials and still gives you fast "Minute-Man" service—you get parts quickly whenever and wherever you need them.

Speed Major Repairs . . . Use Our Unit Exchange Plan

At your request we will ship immediately motors, generators, turbo-chargers, fuel pumps, and other large replacement units for emergency repairs or scheduled overhaul. After the new unit has been installed, the one replaced is returned to us, reconditioned by us, and placed in our "Unit Exchange" stock, ready for the next call. Our charge for this exchange service is only the cost of reconditioning the returned unit. This plan is designed to minimize your stock of spare parts, accelerate your maintenance program, keep locomotives on the road and out of the shop.



Alco DIESEL-ELECTRIC

GE

Working Side-by-Side to Give You Better Service

AMERICAN LOCOMOTIVE and GENERAL ELECTRIC

114-27-3040

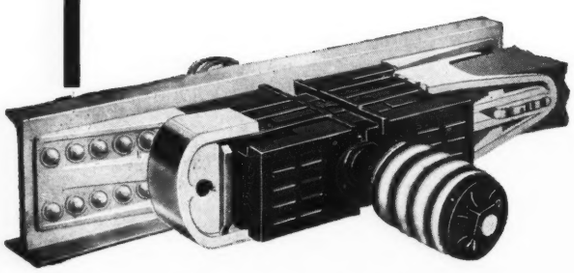
ABSORPTION

THE severe shocks caused when cars are coupled, or when brakes are applied, and the starting shocks caused by the powerful pull of modern locomotives, would cause recoils of almost equal violence if Draft Gears depended upon uncontrolled spring action without absorption.

WESTINGHOUSE FRICTION DRAFT GEAR TYPE NY-11-E (Certified A.A.R.)

Modern Draft Gears provide the necessary spring-control with a friction arrangement, which greatly increases shock-absorbing capacity and minimizes recoil.

Cardwell and Westinghouse Friction Draft Gears fully meet the A.A.R. Draft Gear Requirements for capacity and shock absorption.



CARDWELL FRICTION DRAFT GEAR TYPE L-25-SA (Certified A.A.R.)

Their 2¾" travel controls the shock by means of high cushioning capacity plus absorption, with an ample factor of safety—consequently train slack is kept at a minimum.

CARDWELL WESTINGHOUSE CO., CHICAGO
CANADIAN CARDWELL CO., LTD., MONTREAL

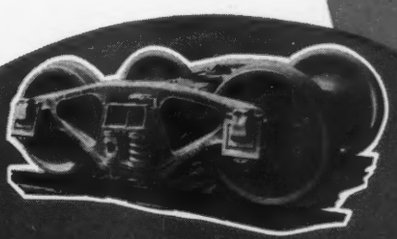
All spring assemblies on the same level

ALL springs (and snubbers) of the Self-Aligning Truck are on the same level. Easiest to inspect . . . easiest to shim.

Removable as a unit . . . yet securely retained.

The design of the truck permits the use of standard A.A.R. springs . . . carried at every repair point.

The simplified construction utilizes designs of proved dependability . . . and economy.



SELF-ALIGNING TRUCKS

. . . now in service under more than 100,000 freight cars

AMERICAN STEEL FOUNDRIES

KEEP YOUR FREIGHT ROLLING O

"Southern Wheel" is Ready....

ON CHILLED CAR WHEELS

Specialized foundries strategically located shipped more wheels so far this year than in 1929.

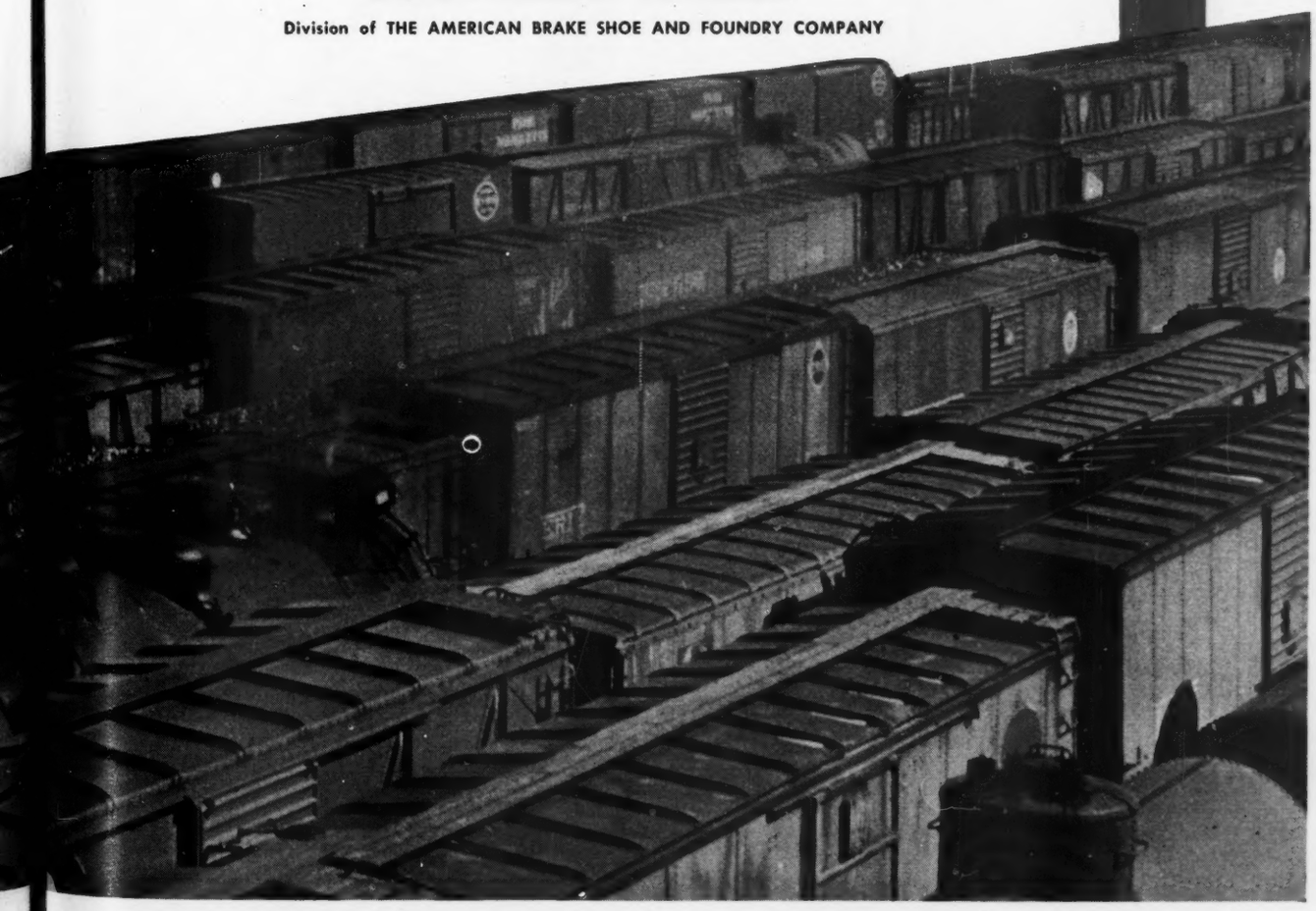
Additional Capacity is Available

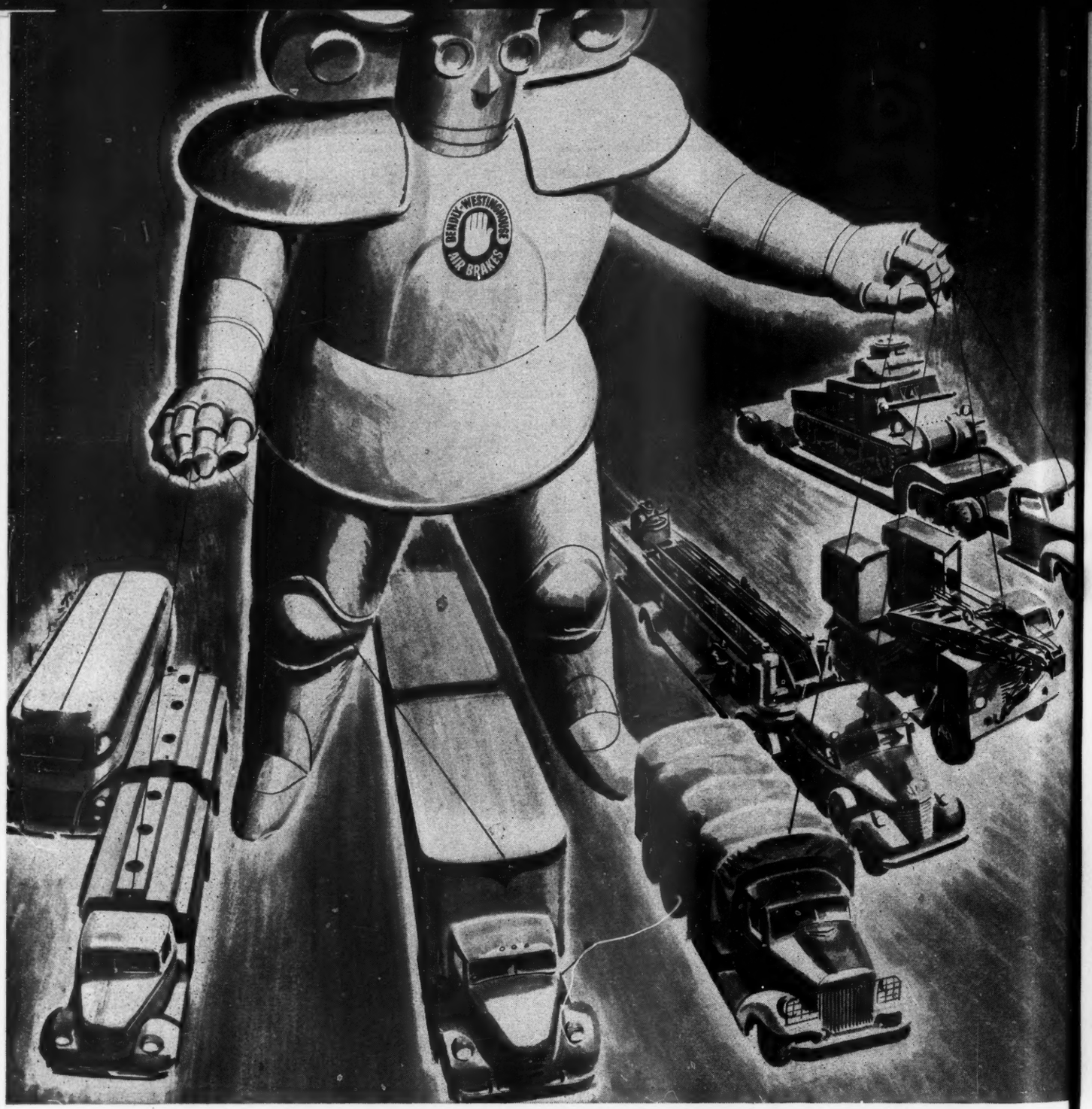
Southern Wheel is ready to turn out all the Improved Chilled Car Wheels your Railroad will require to carry the rising flow of war materials.

Atlanta, Ga.	**Portsmouth, Va.**
Birmingham, Ala.	**Rochester, N. Y.**
Cleveland, Ohio	**St. Louis, Mo.**
Houston, Texas	**Sayre, Pa.**
Pittsburgh, Pa.	**Toledo, Ohio**

SOUTHERN WHEEL

Division of THE AMERICAN BRAKE SHOE AND FOUNDRY COMPANY





A MODERN GENIE

Nothing could more impressively portray the Genie, from an Arabian Nights brought up to date, than this symbol of modern braking ★ Here is unlimited power and flexibility of control which is ready to do your bidding the very moment you accept genuine Bendix-Westinghouse Air Brakes as your standard of safety ★ And no mere myth is the magic of this faithful servant who has come to be known, the world over, as the patron saint of leading commercial transport operators . . . not to mention, a vital factor in the Nation's war effort ★ You should come to know this symbol of the many exclusive advantages in safety and economy you're now missing if you haven't already contacted the Authorized Bendix-Westinghouse Distributor nearest you . . . You'll find him listed in the classified section of your local telephone directory.

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ARE DEVOTED TO YOUR CONVENIENCE AND SAFETY

PROTECTION

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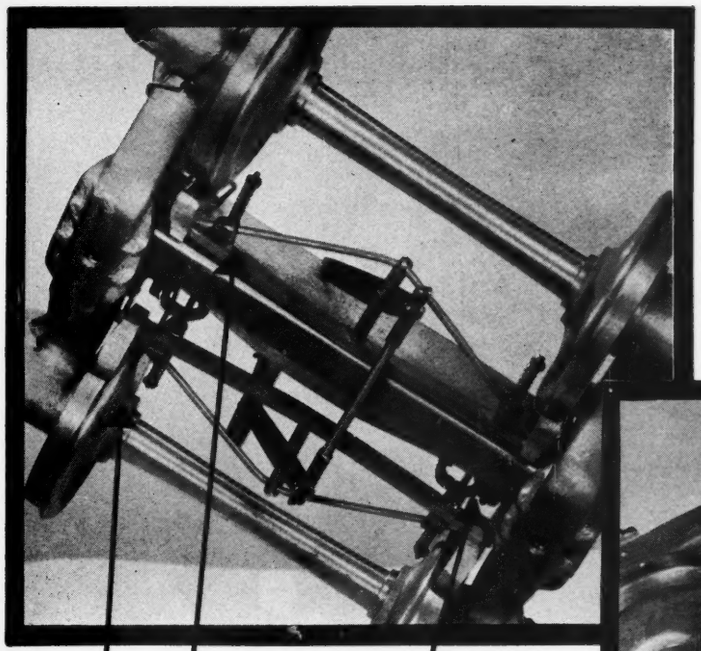
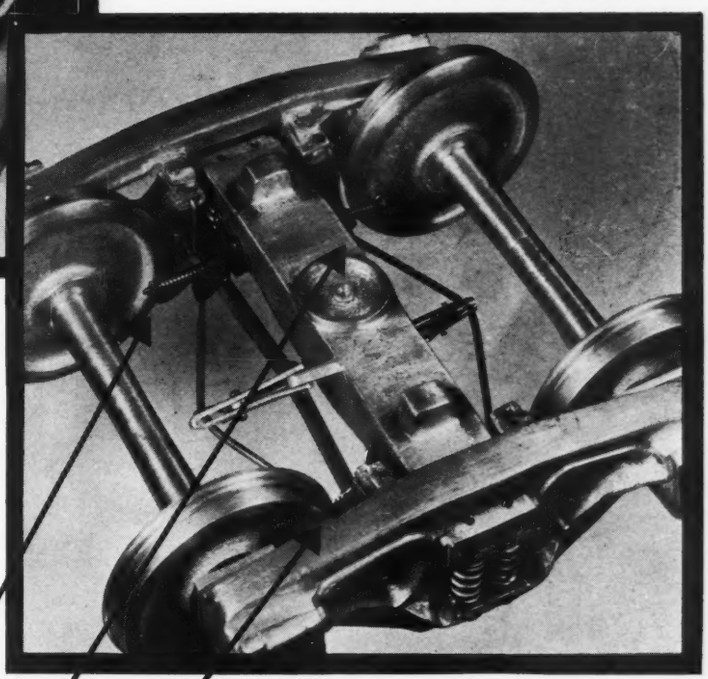


View from Below Truck



View from Above

1. Supports the brake beam in event of brake beam hanger failure.
2. Holds brake beams in horizontal position.
3. Holds brake shoes in proper position in relation to the periphery of the wheel.
4. The brake release feature pulls brake shoes away from wheel contact when brakes are released.
5. Prevents unnecessary wear on account of dragging brake shoes.
6. Reduces wear in hanger, hanger pins and brake heads.
7. Gripco Brake Beam Safety Support is Time Tried and Service Proven. It is fully protected by patents and has A.A.R. approval. Prices upon request.

The Gripco Support prevents unnecessary brake shoe wear by maintaining alignment and effecting prompt release.

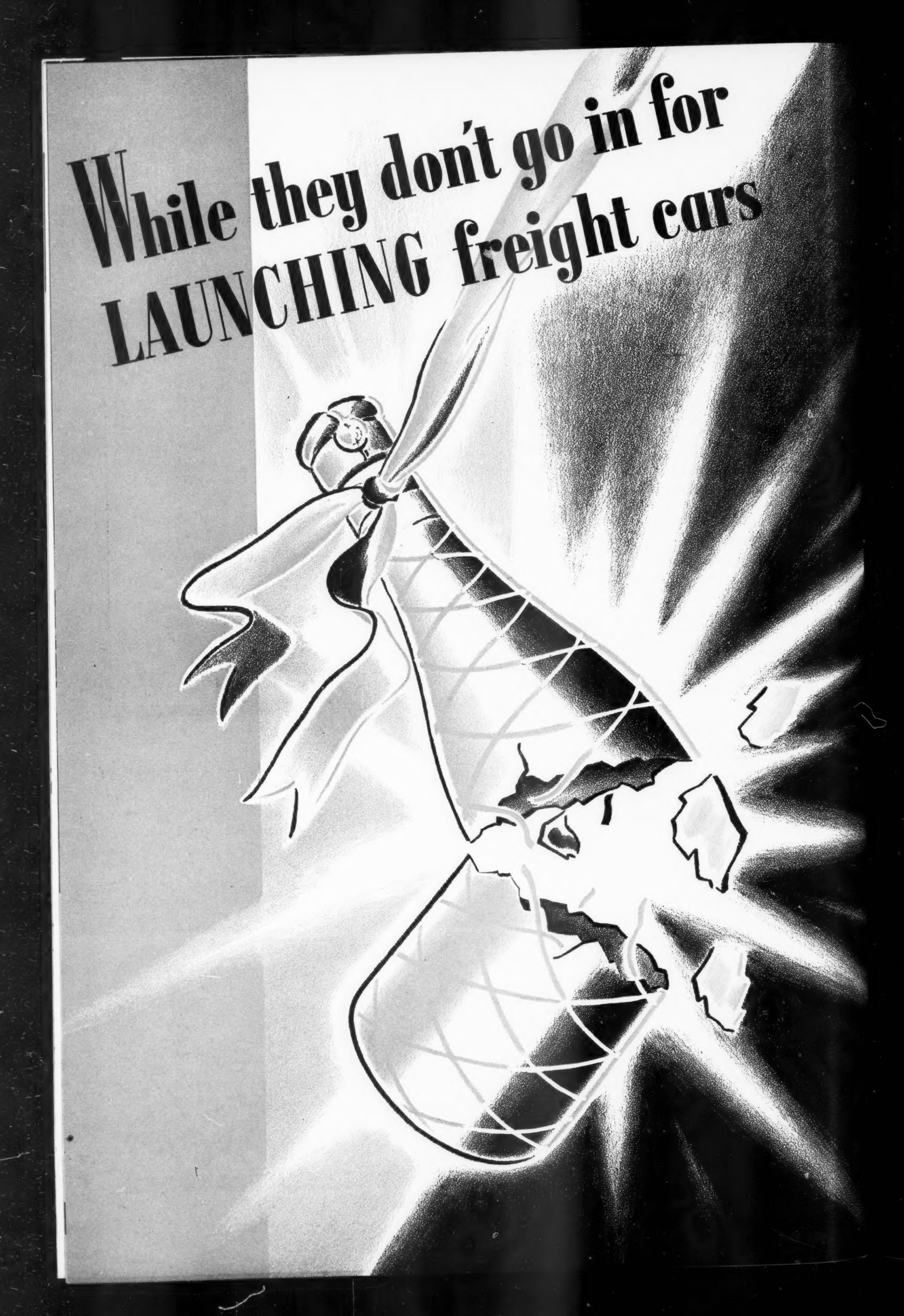
To obtain this accident protection plus the prevention of unnecessary wear and low maintenance cost, use the Gripco Brake Beam Safety Support. Estimates and information supplied on request.

GRIP NUT COMPANY
310 So. Michigan Ave.
Chicago, Ill.

SAFETY SUPPORT AND BRAKE RELEASE

GRIPCO BRAKE SAFETY BEAM SUPPORT

While they don't go in for LAUNCHING freight cars



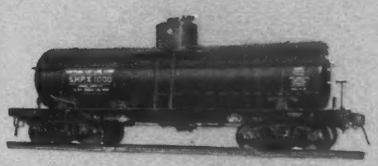
YET... if ever freight cars did deserve a glamorous sponsor and their moment in the spot-light, it's these *fighting* freight cars we are building for the most vital hauling job in this nation's history.

And what a fight against time and enormous demands the railroads are making that our national transport shall meet every defense and war time need! They're keeping 'em rolling at top speed day and night, and they're dragging from the cars now on hand more than twice the amount of transport rendered in World War I.

Such outstanding accomplishment gives full assurance that wherever rails reach, all over the land, it will never be "too little and too late" on the records of railroading in the war effort.

a.c.f. FLAT CAR

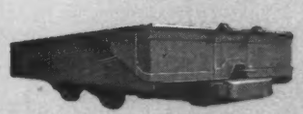
a.c.f. GONDOLA CAR



a.c.f. TANK CAR

a.c.f. HOPPER CAR

a.c.f. ORE CAR



a.c.f. MINE CAR

a.c.f.

american car and foundry company

NEW YORK • CHICAGO
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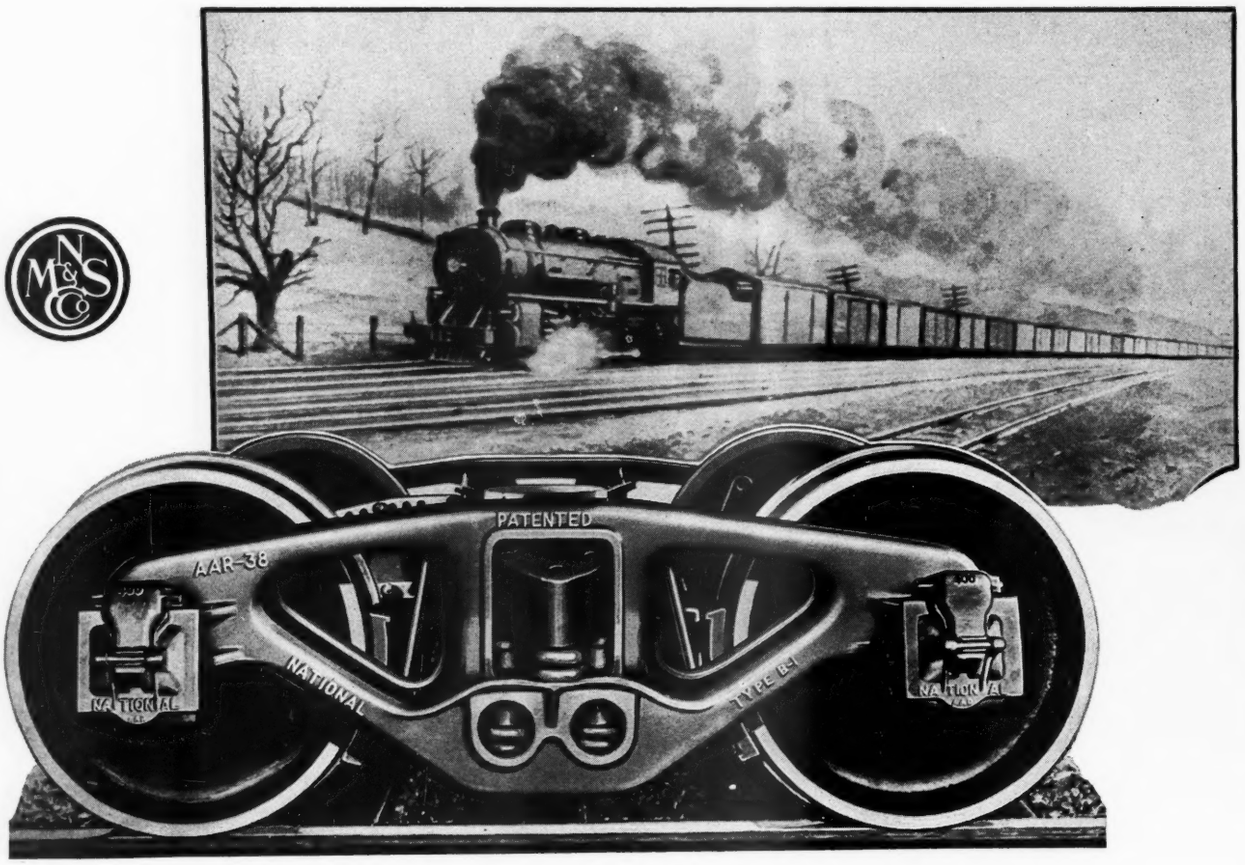
ST. PAUL • SAN FRANCISCO

NATIONAL B-1 TRUCKS
with
DUAL CONTROL



National B-1 Trucks with Dual Control will help greatly to keep cars "on the go".

Spring and friction elements that control both vertical and horizontal oscillations, are BUILT INTO National Dual Control Trucks.

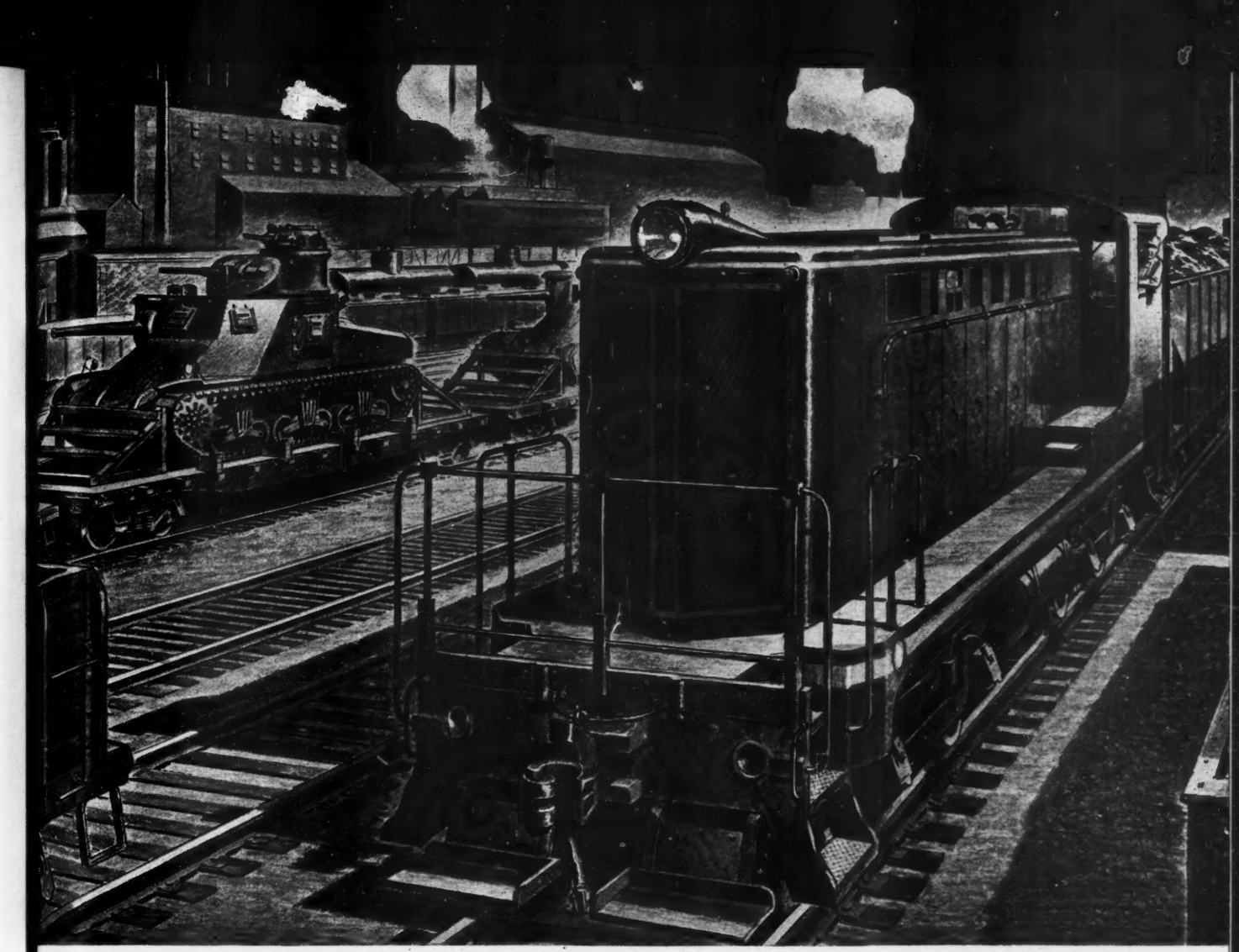
These controls assure smoother riding and greater safety at the higher freight speeds. This is a protection to both car and lading which shows in reduction of maintenance costs.

SPECIFY NATIONAL B-1 TRUCKS WITH DUAL CONTROL

They meet all A.A.R. specification requirements

NATIONAL MALLEABLE AND STEEL CASTINGS CO
General Offices: CLEVELAND, OHIO
Sales Offices: New York, Philadelphia, Chicago, St. Louis, San Francisco
Works: Cleveland, Chicago, Indianapolis, Sharon, Pa., Melrose Park, Ill.

Canadian Representatives: Railway and Power Engineering Corporation, Ltd., Toronto and Montreal



There must be no delay in freight yards

BALDWIN DIESEL-ELECTRICS WILL HELP

Faster switching of cars in and around freight yards means much in the speedier movement of materials. One of the best ways to accelerate the movement of cars in the yards, and at the same time do the job at a lower cost, is to put Baldwin Diesel-electrics to work.

These rugged locomotives have many advantages over older steam power. A Baldwin Diesel-electric starts faster, yet moves away under smooth, even power. It handles cars with ease—minimizes damage. It will operate with maximum availability. It consumes less fuel.

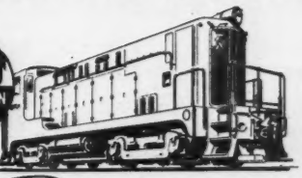
Baldwin Diesel-electrics are engineered and built by specialists in the field of railway motive power, backed by 111 years of locomotive-building experience. They are powered with Baldwin-built De La Vergne diesel engines and Westinghouse electrical transmission equipment.

Baldwin designs incorporate a high degree of visibility for safe operation—accessibility for easy inspection and maintenance—rugged construction required for severe railroad service.

In a Baldwin Diesel-electric, whether 1,000-hp or 660-hp, you have the right combination of engineering skill and manufacturing experience to insure speed in operation, maximum efficiency and minimum cost.

THE BALDWIN LOCOMOTIVE WORKS

BLW THE BALDWIN GROUP



Philadelphia

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CAR BUILDERS' CYCLOPEDIA of American Practice

Edited by ROY V. WRIGHT
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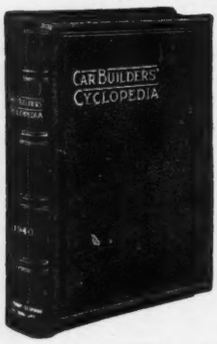

Since 1879 this book has been recognized as the standard authority wherever American built rolling stock is in use. The Fifteenth Edition has been thoroughly revised and enlarged to include an entirely new 50-page Car Shops Section, and a new chapter on Air Conditioning. About one-third of the edition is entirely new and the revisions include the deletion of obsolete definitions and the addition of new ones in the 100-page Dictionary of Terms.

1940. 15th. 1,400 pages, 3,000 illus., 9 x 12, buckram, $5.00; leather, $7.00

When Railroads Were New

By CHARLES FREDERICK CARTER

A fascinating human interest story of the early American and Canadian railroads and of the men who built and ran them. The author, an old railroad man, tells of the beginnings of the Erie, the Pennsylvania, the Baltimore and Ohio, the New York Central, the first Pacific railroad, the Santa Fe, the Rio Grande, the Canadian Pacific and other lines. It is illustrated with reproduction of wood cuts of early locomotives and railroad scenes.

4th (Centenary). 338 pages, 17 illustrations, 6 x 9 inches, cloth. $2.50.

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Mastering Momentum

By LEWIS K. SILLCOX
First Vice-President, The New York Air Brake Company

The author explains the features of high speed operation which have been responsible for such innovations in braking as electro-pneumatic combinations, automatic rail sanding, retardation control, and wheel slide detectors in passenger service; and delayed emergency, rapid quick service propagation and positive release of freight car brakes. The influence of heavy, sustained braking upon wheel and car truck design is discussed, together with an explanation of the responsibility of high braking temperatures upon the shelling and thermal cracking of steel wheels. Spring suspension systems, dynamic effects upon riding qualities, track stresses, and weight transfer tendencies are analyzed. Draft gear design and its relation to shock absorption and the running stability of freight and passenger cars are investigated.

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Railroad Electrification and the Electric Locomotive

By ARTHUR J. MANSON
Manager, Transportation Sales Department, Westinghouse Electric & Manufacturing Company

Written primarily for railway officials and operating men who desire a general knowledge of the design, construction, and operation of electric locomotives and of their application to different kinds of railroad service. Typical problems encountered in electrification of steam railroads are outlined, together with their solutions. Fundamental principles are stressed, and the book is illustrated with photographs, detail drawings, diagrams and charts.

1925. 2nd, 332 pages, 146 illus., 6 x 9 inches, cloth, $3.00

United States Regulations

For Steam and Other Than Steam Locomotives

Laws, rules and instructions for inspection and testing of steam locomotives and tenders, and other than steam locomotives, with interpretations, rulings and explanations on questions raised relative thereto, as prescribed by the Bureau of Locomotive Inspection. Includes safety appliance standards for locomotives as fixed by order of the I. C. C.

1937. 220 pages, complete index, 4¼ x 6½, flexible, $1.25

Diagram of a 4-6-4 Hudson Type Passenger Locomotive

Shows 315 numbered parts, including all the latest appliances. Elevation scale drawings of locomotive and tender and four cross sections.

1941. 40 x 30-inches, flat or folded, $.50

JUNGLE FIGHTER!

Like a wire entanglement, a matted thicket lies across our Army's path. "Bring on the tractors!" is the call of the fighting Engineers.

With tusks of steel and more power than a herd of elephants, the "Caterpillar" Diesels move in. With broad, deep-grousered tracks providing a firm foothold, they drive their bulldozers forward in mighty thrusts — toppling trees, uprooting stumps, sweeping them aside together with brush and rocks. . . . The Infantry, guns and tanks are going through!

On scores of other battle-front jobs, "Caterpillar" Diesel Tractors are helping to deliver similar blows for the cause of free peoples. Building military roads, causeways, bridge-heads, fortifications, gun emplacements; rescuing mired trucks and disabled tanks; moving heavy artillery—are some of the assignments. . . . Because "Caterpillar" Diesels are built with the power, stamina and dependability to see things through!

And there are many more on the way! As fast as "Caterpillar" production can turn them out, *all* "Caterpillar" products—tractors, motor graders, engines and electric sets—will be available to serve in this all-out war.

Those already doing useful work in supporting fields—in oil, mining, lumber, construction, manufacturing, transportation, agriculture and other essential industries—will have all the replacement parts and mechanical service "Caterpillar" and a world-wide dealer organization can provide to *keep them fighting.*

CATERPILLAR *DIESEL*

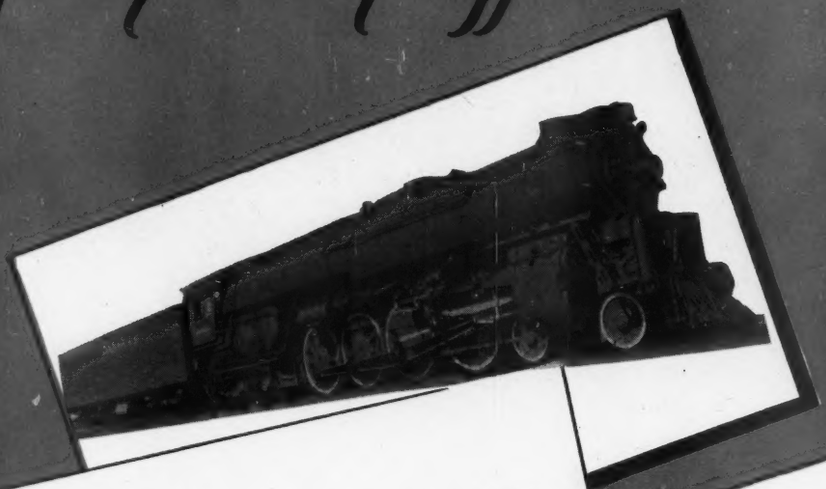
REG. U.S. PAT. OFF.

CATERPILLAR TRACTOR CO. • PEORIA, ILLINOIS

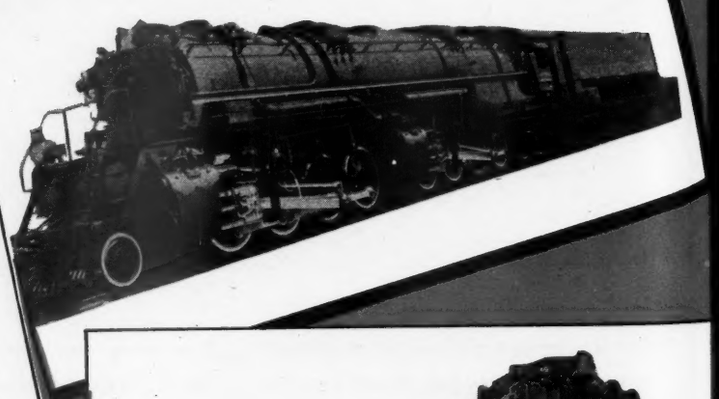
TO WIN THE WAR: WORK—FIGHT—BUY WAR SAVINGS BONDS!

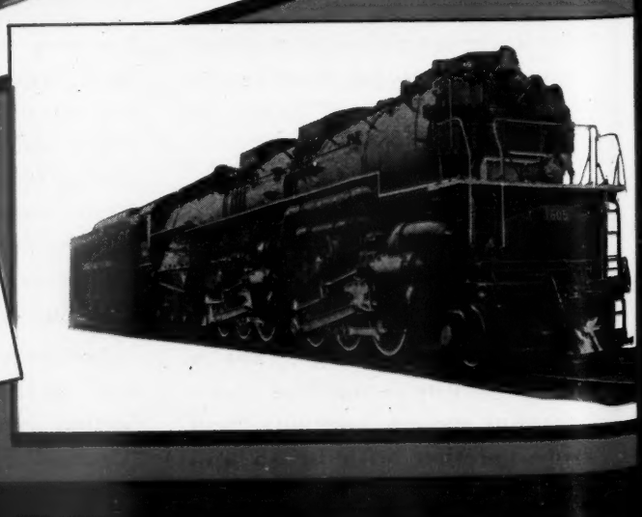
Motive Power Needs

Equally Efficient Brakes



MATCHING the power of any modern locomotive is the No. 8-ET Brake Equipment. It represents an advancement corresponding with the progressive trend in locomotive design to provide greater tractive effort for hauling long, heavy trains at increased speeds ★ Its unique characteristics are: harmonious performance with car brakes in time and pressure; prevention of brakes "creeping on;" automatic limitation of rate and degree of initial service reduction; "controlled" development of emergency cylinder pressure. There is thus provided a ready and reliable means to facilitate smooth and efficient handling of any train that modern locomotives can haul ★ So definitely has this brake increased the serviceability of scores of locomotives that many railroads have been impelled to thus modernize older motive power as it goes through the shop for general reconditioning.





WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNSYLVANIA

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

Vol. 112 June 27, 1942 No. 26

Published every Saturday by the Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa., with editorial and executive offices: 30 Church Street, New York, N. Y., and 105 West Adams Street, Chicago, Ill.

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The Railway Age is a member of the Associated Business Papers (A. B. P.) and of the Audit Bureau of Circulations (A. B. C.)

Subscriptions, including 52 regular weekly issues, and special daily editions published from time to time in New York, or in places other than New York, payable in advance and postage free. United States, U. S. possessions and Canada: 1 year, $6.00; 2 years, $10.00; foreign countries, not including daily editions: 1 year, $8.00; 2 years, $14.00.

Single copies, 25 cents each.

H. E. McCandless, Circulation Manager, 30 Church St., New York, N. Y.

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The Week at a Glance

LESS SOCIALISTIC NOW: "We are less socialistic, believe it or not" in this war than in the last—so Joseph B. Eastman told the Advertising Federation in New York this week—and cited comparative war-time railroad control to prove it. The audience was assured that accumulated freight they may see around ports does not indicate there has been a stoppage. He hopes WPB confidence in the railroads—that all traffic will be handled with the material allocations WPB has made—may be justified. As usual, Joe ribbed his customers a little—telling them he had suspected advertising men of being more interested in the weakness of human nature than in its strength; but he admitted this suspicion indicated, possibly, that he knew less about advertising than his hearers did about transportation.

●

SERVING WITHOUT PAY: There are numerous stretches of railroad in this country—economic justification for the continuance of which has been questioned in recent years—which lines are now doing a more-or-less thriving business. Some segments of the N. Y. O. & W.—a coal road which lost most of its coal—fall into the above-mentioned category. A brief outline of this carrier's problem (as typical of that facing some portions, at least, of not a few other roads) is presented elsewhere herein, together with the expedients which have been utilized to maintain service. The operation of such lines, now relatively well patronized, is helpful to the war effort; and has been of benefit to employees and taxing authorities, but, so far, not to security owners. The O. & W. is making an exhaustive survey of its outlook, because, obviously, when the present crisis is past, earnings prospects will have to be a major guide to realistic management in determining how much of the line can thereafter be justifiably continued in service.

●

ENGINEERS' WAR FOOTING: The Railway Engineering Association has overhauled its standard practices and specifications, temporarily, as required for conservation of materials for war purposes—while retaining the protection essential for continued adequacy of railway service. An article herein records the specific measures adopted to this end, and reveals further steps this effective organization has taken to throw the weight of its professional skill fully behind the most important job which faces Americans today.

●

HIGHWAYS WON'T DO IT: Herr Hitler starved his railroads while he spent his people's substance on flashy superhighways—and is now learning by experience that it takes efficient *railroads* to fight an industrial war. Such is the report out of Nazidom, published elsewhere in this issue, by an American correspondent recently freed from internment. How was it that America, *having largely followed the same transportation policy as Hitler,* managed to escape parallel consequences? A penetrating answer to that question is given by the Belle Fourche (S. D.) Post, which we are privileged to reprint in the editorial pages herein. Its compelling explanation is that the American railroads, being privately operated, struggled against the starvation prepared for them and survived little the worse, physically, for their privation. The German railroads, by contrast, being government-owned, had no alternative, when political power told them to starve, but to obey orders.

●

ROADWAY DEPRECIATION: Mandatory charges to depreciation accounts for roadway property (except the track structure proper) will be required for the railroads beginning next January. The order follows the rules for optional accounting for such depreciation, covered in an I. C. C. order of last January 19—providing for the "group" rather than the "unit" plan. The omission of the track structure from the mandatory order accords with the position of the railroads, who sought this exception.

●

ANOTHER BARGE DEFICIT: Once again the Inland Waterways Corporation has been forced to write its annual report in red ink, as is recorded in the news pages herein. This government facility reveals 1941 net income of $102,000 from the operation of the Warrior River Terminal (its rail line), which was much more than obliterated by losses in its barge service—yielding an overall net deficit of about $190,000. The Corporation claims freight rate "savings" to the "public" of 2.3 million dollars.

●

DECELERATION: Some of the streamliners between Chicago and Denver and Chicago and the Pacific coast have been given slightly slower schedules, to serve the interests of greater efficiency for the war effort—and there have been other minor passenger slow-downs, as reported in the news pages herein.

●

ARMY VIEW OF RR NEEDS: The railroads ought to be allocated more equipment than the WPB is granting them, in the opinion of Brigadier General Gross, the Army's chief of transportation. The General told a Congressional sub-committee this week that he sides with Mr. Eastman on this question.

●

HOW TO GET ROAD LOCOS: There are a lot of consolidation engines doing yard switching which could be put to good use on the road, if there were something to relieve them in the yard. In a specific instance, outlined in detail in an article in these pages, the installation of 11 Diesel-electric switchers in one terminal released 17 consolidations to haul freight on the line. Furthermore, six yard crews—also not plentiful these days—were saved by the change. A considerable economy in operating expenses was realized—but that, of course, is secondary to the main objective, namely maximum effective use of equipment and skilled labor.

NET INCOME '42 AND '29: Gross railway revenues in the first quarter of 1942 were almost the same as in 1929—but, for 8 per cent more freight money, the carriers provided 24 per cent more freight service. They gave more passenger service for far lower charges. The average employee got 30 per cent more money. Taxes were up over 92 per cent. Out of each dollar of revenue in the first quarter of 1929, more than 11 cents were retained for net income, while in 1942 only a little over 6 cents were left. Railroad owners, therefore, despite an unprecedented volume of traffic, are scarcely more than half as well off now as in 1929. These and other revealing contrasts in the current railway situation are set forth editorially on another page in this issue.

●

COURTESY NOT RATIONED: Passengers are being well informed of the reasons for crowded trains—and most of them are understanding. An editorial herein suggests, however, that there is no government limitation on the quantity or quality of consideration and politeness which employees may dispense—a fact with which, seemingly, some employees are insufficiently familiar. Competition after the war will be tough. The railroads are now enjoying the widest possible contact with the public. They, including their employees, thus have an opportunity to make friends for themselves against a time when, quite possibly, they will need them.

●

DEMURRAGE BOOST BILL: Senator Clyde Reed's bill to curtail free time and sharply increase demurrage charges to as much as $25 per car-day will have a committee hearing beginning June 30.

●

ODT KEEPS TRAFFIC VIGIL: The ODT has put some teletypes and a punch card lay-out down in the cellar, and current "train sheet" information is fed into this mill, covering every important rail route in the country. Reports show car movement, loaded and empty, into and out of every terminal (so incipient yard congestion can be detected at the outset), volume and location of loadings, interchange, etc. The figures are promptly analyzed by experienced men, and untoward developments are reported to the responsible officials for prompt remedial action. A daily traffic map is compiled so that conditions may be more readily understood by those to whom the figures would lack significance. A short article herein relates more details of this reporting system.

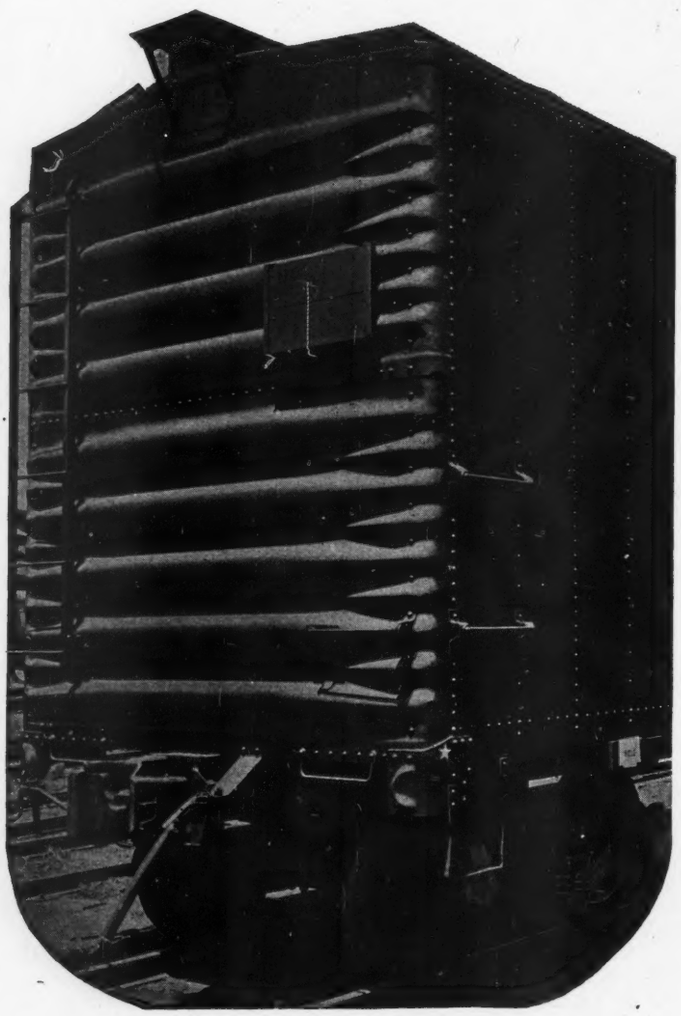
●

ACCIDENTS VS. VICTORY: D. B. Robertson, president of the B. of L. F. & E. has issued an urgent call for a public campaign to eliminate grade crossing accidents in the interest of the war effort. Mr. Robertson made this plea at the award of the Harriman Memorial Safety Medals in New York on Thursday of this week, and further details will be reported in next week's *Railway Age.* There is no question that these accidents are gravely endangering the railways' vital service to the war.

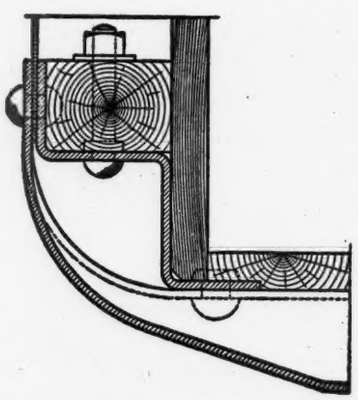
DREADNAUGHT ENDS

WITH ROUND CORNERS

IN COMBINATION WITH W-SECTION CORNER POSTS



PROVIDE THE INCREASED STRENGTH AND RESILIENCY REQUIRED TO PROTECT CAR AND LADING WITH PRESENT HIGH SPEED FREIGHT



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RAILWAY AGE

Don't Neglect the Passenger

Rendering adequate freight service is of vital importance to keeping the favorable opinion of large and small shippers, as well as to the war effort. But there are many thousands more passengers than shippers—including thousands now using the railways who for years have hardly used them. Holding and gaining the good opinion of passengers now will be very important during the war and after it. In spite of the great increase in traffic, and unavoidable restrictions on service, no effort should be spared to satisfy passengers now.

Passengers are being asked to be patient with train delays, missed connections, lack of accommodations and other inconveniences. The efficiency with which the railways are handling troop movements, the dispatch with which they are moving army freight, the importance of efficient transportation to every phase of the war effort, give them the right to make this request. Inquiries of several hundred passengers indicate they appreciate the situation, and are quite willing to overlook late arrivals and crowding even of important trains, which in peacetime made remarkable records for comfort and on-time performance. No reasonable traveler expects a continuance of the superfine, luxurious service to which the railways have accustomed their patrons since the first streamliner was introduced in 1934.

Unfortunately, experienced travelers complain of widespread deterioration of passenger service in ways that are unnecessary.

The public will accustom itself to slow dining car service, but not to soiled linen and dirty dishes; and politeness and courtesy by stewards and waiters have not been rationed. Unavoidably, more passenger trains will run late; but schedules can be lengthened when it is found they cannot be maintained; and why should the patron be given a brusque "brush-off" by a member of the train crew when he asks a civil question as to the train's probable time of arrival at his destination? If the trainman doesn't know, he can say so politely. And why should passengers have to bear insolence from red caps at many large stations? These men are working hard and under unusual strain. But who isn't, in these days of war strain?

Discourteous employees are in the minority; but their conduct is likely to be remembered long after courteous treatment has been forgotten. After the war the railways are going to be faced with the hardest competition ever known. Good or ill-will of the traveling public created now will be a great asset or liability then. In too many instances employees seem to have taken the request that the passenger be patient to mean that employees don't have to be considerate. That most emphatically does not express management policy; but the traveling public deals with employees, not management; and, where needed, corrective measures cannot be applied too soon.

The Railroad Paradox

Traffic, gross earnings and operating efficiency of the railways in the first half of 1942 have all set new high first half-year records; but, paradoxically, the average price of their stocks in June has been the lowest in any June since beginning of the depression, excepting in 1932 and 1938—*only one-seventh* as high as in June, 1929; less than half as high as in June, 1936 and 1937.

Such facts as the following are the explanation: The public considers present large earnings temporary. Stockholders, because of increased taxes, are benefiting comparatively little by increased net income, hardly at all by increased dividends, and fear further increases of taxes.

Reorganization plans of the Interstate Commerce Commission wiping out the stock of bankrupt railroads destroy confidence in all railroad shares.

Complete statistics of earnings, expenses and taxes in 1942 are as yet available only for the first quarter. The increase in gross earnings over 1941 was 29 per cent, or almost $332 million. Here is what became of it: Increase in operating expenses and equipment and joint facility rentals, $234 million; increase in taxes, $72 million; increase in net income, $26 million. Thus, while the increase in *taxes* was almost 22 per cent of the increase in gross earnings, the increase in *net income* available for dividends and improvements was less than 8 per cent of it. Federal income taxes alone increased from $26 million to $83 million—2¼ times as much as net income; and payroll taxes for the benefit of employees increased from $30 million to $39 million.

Comparisons with 1929 are, perhaps, even more illuminating because gross earnings in the first quarters of 1929 and 1942 differed only one-tenth of one per cent. Ton-miles of freight service rendered shippers were 24½ per cent greater than in the first quarter of 1929; but, because freight rates were lower, freight earnings increased only 8 per cent. Passenger traffic also was larger; but, because of lower fares, passenger earnings were smaller. Although average wage per month of employees increased 30 per cent—from $145 to $189—operating expenses were $62 million less. But this reduction represented a very questionable saving, because, largely due to inability this year to get materials, $42 million of it was made in maintenance expenses.

Entirely because of the reduction of expenses, net revenue from operations—after payment of larger equipment and joint facility rentals—was $55 million more than in 1929; but this was exactly offset by a decline of $55 million in income from sources other than operation. Fixed charges were $12 million less. Here taxes got in their work. They were 92½ per cent, or $88 million, more than in the first quarter of 1929. A reduction of net income from $171 million in the first quarter of 1929 to $95 million in the first quarter of 1942 was the final outcome. After taxes there was left available in the first quarter of 1929 about 11½ cents of each dollar of gross earnings for dividends and improvements; in the first quarter of 1942, only about 6½ cents.

Thus, in spite of the greatest traffic, gross earnings and efficiency in their history, the railways, in the first quarter of 1942, were, from the standpoint of stockholders, little more than half as prosperous as in the first quarter of 1929.

Without any more reason than anybody else to complain about taxes, the railways are not only, by their unprecedented efficiency, helping win the war, but are also—at large cost to their stockholders—doing their share to pay for it.

Why Did He Resign?

Nothing had happened since the President appointed the Transport Study Board which had so raised hopes that it might render a practical service as its selection of Professor W. J. Cunningham of Harvard to conduct its investigation into the comparative economy and fitness of the various forms of transportation. And confidence in the board has been correspondingly shaken by Professor Cunningham's resignation from this assignment. Why he withdrew is a matter of conjecture. The only explanation we can surmise is that some board member or members, while welcoming the confidence his participation in its work would inspire, was unwilling to grant him the freedom of action upon which any self-respecting scholar would insist.

We do not contend that Professor Cunningham was indispensable; but it is self-evident that the contentions of rival agencies of transportation cannot be weighed in a manner acceptable to the competitors if the investigator is to be open to suspicion of partisanship. By his service a number of years ago with the Committee of Railways and Highway Users, Professor Cunningham demonstrated his impartiality and objectivity in dealing with the conflicting claims of these rival agencies. Throughout his academic career he has demonstrated his practical turn of mind by tackling concrete disputes in the transportation industry with facts, sound judgment and intellectual integrity. A partisan or merely theoretical report by the Transport Study Board on the comparative economy of the several agencies will serve no useful purpose. What is needed is an acceptable concrete guide for public policy. Did some part of the board show a disposition not to permit a competent scholar to make a purely scientific, factual investigation? If so, what hope is there that the board will justify its existence?

The three members of the Transport Board are Nelson L. Smith of New Hampshire, Robert Webb of Kentucky, and C. E. Childe of Nebraska. Messrs. Smith and Webb were public utility commissioners with no ascertainable bias for or against any agency of transportation. Mr. Childe was for years a persistent—indeed, a professional—propagandist for a

point of view strongly favorable to the partisan claims of competitors of the railroads. We criticized his appointment, but hoped he would rise above his previous partisanship—as many advocates have on mounting the bench.

If the suspicion is unfounded, that Mr. Childe's inability to do so caused Professor Cunningham's resignation, the sooner the true explanation is given by the board the better it will be for its reputation.

There is no apparent reason for such suspicion of Mr. Smith or Mr. Webb; but Mr. Childe's past activities do make it highly questionable that his domination of the board would contribute toward a study and report tending to afford a sound basis for future public policy affecting competition in transportation.

Essential Work Equipment

In the face of the nation's war effort and unprecedented need for transportation, those charged with maintenance of railway tracks, bridges and other fixed properties are confronted with larger and more imperative programs of work than since 1930, and with a shortage of labor. Maintenance of way and structures men can, therefore, reflect with satisfaction that mechanization of maintenance work has been raised to a high degree of proficiency, speeding up output per man hour, minimizing interference with train operation, and, in most cases, permitting a quality and permanence of results that could not be achieved by hand methods—all indispensable to satisfactory completion of the large programs ahead. Railway men generally realize that but for this transition to mechanical aids, their forces would be in a predicament that might seriously handicap the railways in providing the transportation being demanded.

In the light of these facts, it is difficult to understand why some maintenance men are hesitant to seek work equipment they need, even for replacements, fearing they may deprive war industries of certain critical materials. This attitude is commendable as indicating a highly desirable state of mind toward the needs of our war industries; but it disregards the very important fact that the railways are themselves one of the most important of these war industries, and as essential as those that furnish the raw materials and finished implements of war. Without efficient railway service to link other war industries, move finished products to training, defense and embarkation points, and provide safe, expeditious transportation of many thousands of troops, our war effort would be seriously impaired. With the shortage of labor skilled in maintenance of way work growing rapidly, the railways must have equipment essential to doing such work by methods insuring the most efficient use of the labor available.

It is not in the interest of the nation to ask for equipment not essential to the expeditious completion of necessary work with a minimum expenditure of manpower. But neither is it in the interest of the nation, however good the intention, unnecessarily to curtail operations essential to adequate and safe rail transportation, or to carry out such operations by methods that unnecessarily waste labor, which is becoming as critical as the most critical of materials. All the critical materials required to keep the railways keyed to the war's requirements will be inconsequential as compared with the waste of labor and jeopardy to the war effort that will be caused if, through priority restrictions or a false sense of patriotic duty, the equipment necessary to keeping railway fixed properties in good condition is not acquired and used.

"Defeat by Rails"

"Highways and trucks—that is the travel of the future. So thought many of the leaders of this nation. So thought Hitler.

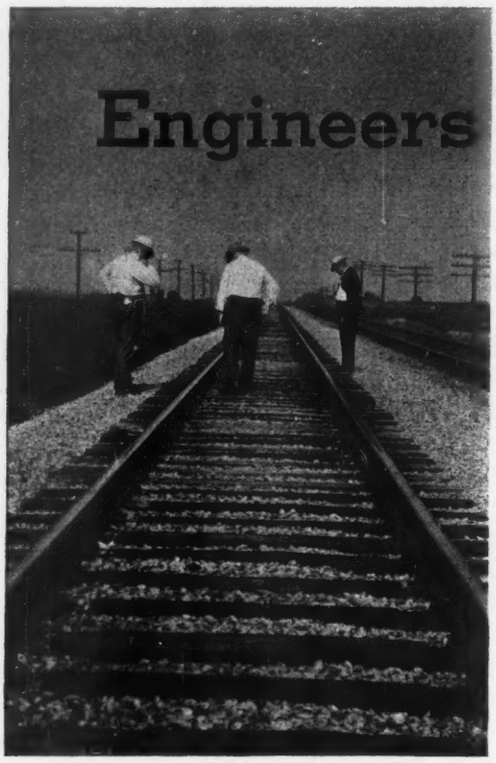
"For his war, Hitler built trucks and trucks and highways and highways. And over these highways passed his armies and their supplies. All was victory—until he attacked Russia and winter. Then he felt the need of railroad transportation. But the railroads had been allowed to deteriorate in the emphasis on trucks and highways. The neglected lines could not keep up the necessary flow of supplies. Hitler tasted his first defeat.

"Though many leaders in this country believed that the truck and the highway were taking the place of the railroad, railroad builders did not let themselves be pulled under by the belief. They continued to repair road beds, to construct stronger freight cars and more powerful engines. They concentrated upon safety and speed. There was no dictator here to say that railroads had been supplanted by trucks and highways.

"The war came to our nation. Oil tankers were sent to the bottom. Fleets of trucks or pipe lines could not carry enough oil to keep the wheels turning. An oil shortage that would retard the war effort threatened. But the railroad lines were still in order—at a peak of efficiency—and down the well-tended rails sped trains of tank cars. The war industries of the nation were kept at full speed because the railroads of the United States had not been allowed to deteriorate because of one man's opinion.

"Over rails our soldiers and supplies are speeding toward embarkation points. Over the rails raw materials are speeding to be made into bombs, planes and tanks. The trucks are still in use, still necessary, but for the long, fast pull no transportation has taken the place of rails. Hitler found that out too late. Free enterprise, which permitted railroads to develop in a time when trucks seemed to be the coming mode of transportation, free enterprise may mean the difference between victory and defeat for Hitler, the dictator."

From the Belle Fourche (S. D.) Post.



Engineers Put War Needs First

A. R. E. A. streamlines its procedures to meet emergencies growing out of war—adopts "emergency provisions" of specifications*

Important Elements of the Track Structure Have Been Affected by the Scarcity of Critical Materials

TO cope with the many new and urgent problems confronting railway engineering and maintenance men as the result of the war, and particularly those problems arising from the scarcity of critical materials, the American Railway Engineering Association (acting as the Construction and Maintenance section of the Association of American Railroads), has developed and adopted a number of innovations in organization and procedure which have already contributed in a substantial way to the war effort of the country, while insuring that the essential engineering needs of the railways will not be entirely overlooked. Of greatest importance among these innovations, and the key to the dispatch with which the association is prepared to make recommendations and to act upon those of others, is an arrangement which provides for "emergency committees" of four to six men, each to represent particular standing committees or groups of committees of the association, with power to submit recommendations in the interest of the war needs of the country—and an emergency committee of four men representing the Committee of Direction of the Section, which has the authority to promulgate and adopt emergency measures for the association, for the duration of the war.

Other measures which have been provided for in the new set-up, and which have already been taken, include the adoption of "emergency provisions" affecting certain of the specifications in the Manual of Recommended Practice of the association, and the issuance of circular letters to the chief engineering officers of the railways from time to time, promptly as occasion demands, to the end that the recommendations of the various emergency committees will be put into effect with minimum delay. Still another function being performed by the association is to serve as a reservoir from which to recruit members for special committees appointed at the request of C. H. Buford, vice-president, Operations and Maintenance department, A. A. R., to perform special services, usually on short notice and with the greatest speed.

Already, functioning under the new set-up, numerous specifications and plans of the association have been recommended for general use for the duration of the war, while others have been abridged or dropped, to simplify material and manufacturing problems; emergency provisions have been adopted for a number of existing specifications, largely to eliminate reference to copper content; and many valuable suggestions have been made and disseminated among the railways in the interest of material conservation, substitution, reclamation and simplification.

Specifications for Rail and Track Accessories

Late last year, the A. R. E. A. Committee on Rail became identified with one of the initial efforts along this line, through the selection of nine of its members for participation in the work of the Technical Advisory Committee on Rail and Track Accessories, of the Committee on National Emergency Steel Specifications, created by the War Production Board, which committee, after several meetings, agreed to recommend the following specifications with respect to rails and track accessories for exclusive use in the manufacture of the materials covered. It will be noted that all of these specifications are those of either the American Railway Engineering Association or the American Society for Testing Materials. In those cases where the specifications of the two organizations cover the same material, the provisions are substantially identical, and one specification serves as an alternate for the other.

AREA Specifications for Open-Hearth Steel Rails, 1939

ASTM Standard Specifications for Open-Hearth Carbon-Steel Rails, A 1-39

ASTM Standard Specifications for Open-Hearth Steel Girder Rails for Plain, Grooved and Guard Types, A 2-27

ASTM Standard Specifications for Low-Carbon-Steel Joint Bars, A 3-33

ASTM Standard Specifications for Medium-Carbon Steel Joint Bars, A 4-14

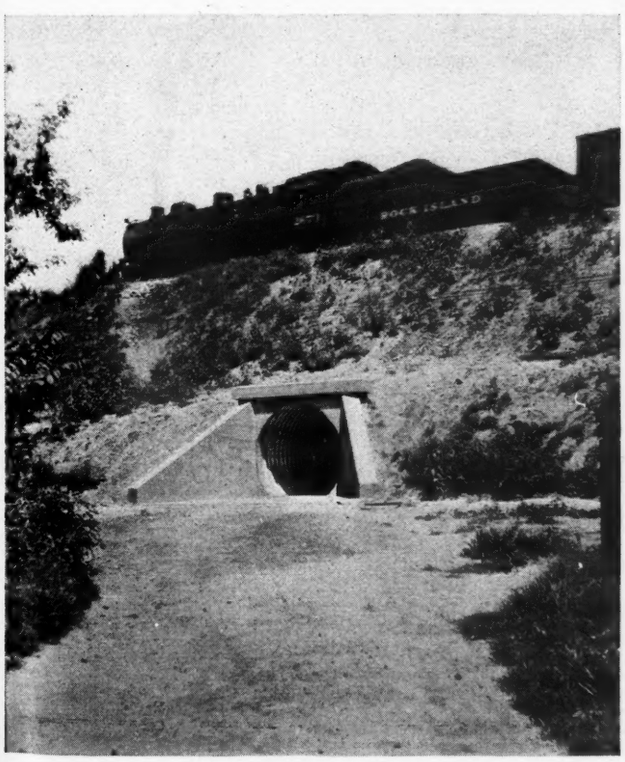
AREA Specifications for Quenched Carbon-Steel Joint Bars, 1936

* The information contained in this article is based on a report prepared by W. S. Lacher, secretary of A. R. E. A., to appear in Bulletin 432 of the association, for June-July.

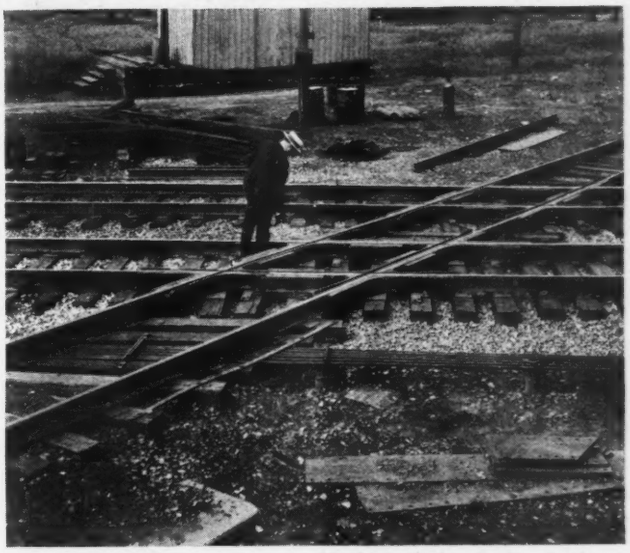
ASTM Standard Specifications for Low-Carbon Steel Track Bolts and Nuts, A 76-33
AREA Specifications for Heat-Treated Carbon-Steel and Alloy-Steel Track Bolts, 1939
ASTM Tentative Specifications for Heat-Treated Carbon- and Alloy-Steel Track Bolts and Nuts, A 183-40T
AREA Specifications for Soft Steel Cut Track Spikes, 1934
ASTM Standard Specifications for Soft Steel Track Spikes, A 65-33
AREA Specifications for High-Carbon Steel Track Spikes, 1942
ASTM Standard Specifications for Steel Screw Spikes, A 66-33
AREA Specifications for Steel Tie Plates, 1941
ASTM Standard Specifications for Steel Tie Plates, A 67-33
AREA Specifications for Hot-Worked, High-Carbon Steel Tie Plates, 1941
ASTM Standard Specifications for Hot-Worked High-Carbon Steel Tie Plates, A 241-41

To simplify the general application of these specifications, and with the object of deleting references to certain critical materials—for example, copper and alloy steel—the Technical Advisory committee recommended for adoption certain exceptions to the terms of a number of the specifications, which exceptions have been designated as emergency provisions. These provisions, in so far as they apply to A. R. E. A. specifications, have been endorsed by the association's committees on Rail and Track, and have been made a matter of record on yellow rider sheets which have been mailed to the chief engineering officers of all member roads, and also inserted in the A. R. E. A. Manual Supplement for 1942. The Administrative Committee on National Emergency Steel Specifications has recommended to the War Production Board that the foregoing list of specifications be incorporated in a limitation order requiring adherence thereto by all producers and consumers.

At the suggestion of Vice-President Buford of the A. A. R., the A. R. E. A., together with the two other sections of the Engineering division, participated in another somewhat parallel but much more extensive proj-



The Pinch in Steel and Cast Iron Has Practically Ruled Out Culverts of These Materials for the Duration



Special Trackwork Involving Manganese Steel, Is, of Necessity, Being Confined to Locations of Extremely Severe Service

ect for the standardization and simplification of materials through the offices of the A. A. R. In this regard, six of its representatives met with representatives of the Signal section, the Electrical section, the Mechanical division, and the Telegraph and Telephone section of the Operating-Transportation division, and developed the following list of specifications, which, in a circular to the chief engineering officers of member roads, was recommended for exclusive application for the duration of the war:

Specifications for Materials Used in Roadway and Structures Recommended for Exclusive Use for the Duration of the War

Cast iron culvert pipe	ASTM A 142-38
Corrugated metal culverts	AREA-1936
Extra-strong or triple-strength vitrified clay culvert pipe	AREA-1942
Reinforced concrete pipe	ASTM C 76-37 or AREA-1939
Wood fence posts	AREA-1942
Concrete fence posts	AREA-1932
Metal fence posts	AREA-1928
Zinc-coated (galvanized) iron or steel farm-field and railroad right-of-way wire fencing	ASTM A 116-39
Zinc-coated (galvanized) iron or steel barbed wire	ASTM A 121-39
Open-hearth steel rail (with emergency provisions adopted March 19, 1942)	AREA-1942
Quenched carbon-steel joint bars	AREA-1936
Medium carbon-steel joint bars (for light sections and insulated joints)	ASTM A 4-14
Heat-treated carbon-steel and alloy steel track bolts (with emergency provisions adopted March 19, 1942)	AREA-1939
Spring washers (with emergency provisions permitting optional lower reaction pressures—to be issued later)	AREA-1933
Soft steel cut track spikes (with emergency provisions adopted March 19, 1942)	AREA-1934
High-carbon steel track spikes (with emergency provisions adopted March 19, 1942)	AREA-1942
Medium-carbon steel tie plates (with emergency provisions adopted March 19, 1942)	AREA-1942
Hot-worked high-carbon steel tie plates (with emergency provisions adopted March 19, 1942)	AREA-1942
Special trackwork for rails 90 lb. and heav-	

ier (switches, frogs, etc.) (Issued in Portfolio of Trackwork Plans)	AREA-1942
Track tools	AREA-1942
Crossties	AREA-1934
Switch ties	AREA-1934
Tie plugs	AREA-1925
Lumber and timbers—Specifications of the Southern Pine, West Coast, and other regional manufacturers' associations	
Wood piles	AREA-1937
Preservative treatment of wood	AREA-1927
Treating processes	AREA-1942
For quantity and character of preservative for treatment with creosote-petroleum, use federal specifications TT-W-568 and TT-W-571B	
Creosote	AREA-1936
Creosote-coal tar solution	AREA-1942
Zinc chloride	AREA-1926
Other preservative salts	Federal
Measuring and sampling creosote	AREA-1935
Creosote analysis	AREA-1939
Chemical analysis of zinc chloride	AREA-1926
Preservative treatment of Douglas fir	AREA-1942
Portland cement (with limitations as to types of cement now under consideration by ASTM)	ASTM C 150-41
Steel reinforcing bars	
Billet steel	ASTM A 15-39
Rail steel	ASTM A 16-35
Axle steel	ASTM A 160-39
Tank hoops (Steel to be ASTM A 7-39)	AREA-1940
Structural steel for buildings, bridges, water tanks and towers, and hardware for wood trestles	ASTM A 7-39
Structural rivet steel	ASTM A 141-39
Structural silicon steel	ASTM A 94-39
Note—To be specified only in special cases; nickel and other alloy steels not to be specified	
Carbon steel castings	ASTM A 27-39 Grade B 1
Gray iron castings	ASTM A 48-36 Class 25
Bronze castings for turntables and movable bridges and for bearings in expansion plates in fixed bridges	ASTM B 22-40T
Rolled copper-alloy bearing and expansion plates for bridges and other structural uses	ASTM B 100-40
Alloy steel for scale pivots and bearings	(SAE 6,195) (SAE 52,100)
High carbon steel for scale pivots and bearings	(SAE 1,095)
Chemicals to be used for water treatment	
Soda ash	AREA-1936
Hydrated lime	AREA-1936
Quick lime	AREA-1936
Sulphate of alumina	AREA-1936
Sulphate of iron	AREA-1936
Salt to be used for regeneration of zeolite water softening plants	AREA-1932
Cast iron pipe and special castings (designated as A-21.1-1939)	AWWA *
Hydrants and valves	AWWA *-16

Procedure Streamlined

One of the most difficult problems presented to the association by its efforts to effect the most expeditious handling of emergency matters was to develop a procedure that would permit modifications of Manual material to become effective without waiting for confirmation by formal action of the association at its annual meetings. The first approach to this problem was to authorize its various standing committees to establish modified practices on the authority of a letter ballot of their members, to receive subsequent ratification by some advisory body of the association. It was understood, of course, that any amendments of Manual material effectuated in this way would have an emergency status and would cease to be effective with the termination of the war emergency.

While this arrangement had certain merit, it became evident that an even more direct line of procedure was desirable to secure expeditious action and to insure the most effective co-operation with the A. A. R. Accordingly, it was decided to adapt a plan of "short-cut" organization that had proved effective in some of the other divisions and sections of the A. A. R. Briefly, this plan calls for the appointment of small emergency technical committees with power to act for or to pass on acts of standing committees in proposing and endorsing emergency action. The plan also provided for the appointment of an emergency committee to represent the Board of Direction, such committee to have authority to approve for immediate application the recommendations made by the emergency technical committees. This plan was adopted and, putting it into effect, President H. R. Clarke of the association appointed the following emergency committees:

Emergency Committee Personnel

BOARD OF DIRECTION

H. R. Clarke (chairman), ch. engr. m. of w., C. B. & Q., Chicago.
F. R. Layng, ch. engr., B. & L. E., Greenville, Pa.
E. M. Hastings, ch. engr., R. F. & P., Richmond, Va.
A. R. Wilson, engr. b. & b., Penna., Philadelphia, Pa.

ROADWAY AND TRACK PROBLEMS

W. H. Penfield (chairman), ch. engr., C. M. St. P. & P., Chicago (Com. 4)
J. B. Akers, asst. ch. engr., Sou., Washington, D. C. (Com. 4)
S. E. Armstrong, engr. m. of w., N. Y. C., New York (Com. 4)
H. R. Clarke, ch. engr., m. of w., C. B. & Q., Chicago (Com. 4)
C. J. Geyer, engr. m. of w., C. & O., Richmond, Va. (Com. 4)
J. L. Gressitt, asst. ch. engr., m. of w., Penna., Philadelphia, Pa. (Com. 4)

STRUCTURAL PROBLEMS

J. E. Bernhardt (chairman), br. engr., C. & E. I., Chicago (Com. 15)
R. P. Hart, br. engr., M. P., St. Louis, Mo. (Com. 7)
J. F. Leonard, engr. b. & b., Penna., Pittsburgh, Pa. (Com. 8)
C. E. Sloan, engr. of br., B. & O., Baltimore, Md. (Com. 15)

WATER SUPPLY AND WATER TREATMENT

R. C. Bardwell (chairman), supt. water supply, C. & O., Richmond, Va. (Com. 13)
R. E. Coughlan, engr. of tests, C. & N. W., Chicago (Com. 13)
W. L. Curtiss, mech. engr., N. Y. C, New York (Com. 13)
A. B. Pierce, engr. of water supply, Southern, Washington, D. C. (Com. 13)

TIES AND WOOD PRESERVATION

H. R. Duncan (chairman), supt. timber preservation, C. B. & Q., Galesburg, Ill. (Com. 17)
R. S. Belcher, mgr. treating plants, A. T. & S. F., Topeka, Kan. (Com. 17)
W. J. Burton, asst. to ch. engr., M. P., St. Louis, Mo. (Com. 3)
W. D. Simpson, asst. ch. engr. m. of w., Seaboard, Norfolk, Va. (Com. 3)

* American Water Works Association

Corresponding committees have been appointed to function in an emergency capacity for both the Signal section and the Electrical section of the Engineering division.

Under the new plan of action adopted by the association, recommendations for emergency action initiated by any of the standing committees, or acted upon by them at the request of others, will be referred to the appropriate emergency technical committee and, upon ratification by that committee, will be referred to the emergency committee representing the Board of Direction for approval.

The foregoing emergency committees also stand ready to deal with various special assignments which, judging from the experience of the last six months, will be presented from time to time.

All modifications of standard specifications and standard practices, when approved by the emergency committee representing the Board of Direction, are to be issued as colored (yellow) riders to the specifications amended, which will be designated as Emergency Provisions, and which will become effective upon issuance, but which will lose force automatically upon the termination of the war emergency. Already, two such riders, dealing with modifications of specifications for rail and track accessories, as already mentioned, have been issued, as well as a third, dealing with the trackwork plans of the association, which will be referred to later.

Indicating the intention of the association to extend all-out co-operation in the conservation of critical materials during the war emergency, over and above the specific actions of the emergency committees, is the following statement contained in a "Notice of Emergency Action," which appears as a foreword on yellow paper in the 1942 Manual supplement, now being made available to members, which reads as follows:

"In addition, it should be understood that any recommended practice now appearing in the Manual, which clearly interferes with the war effort, or any stipulation appearing in the supplement transmitted herewith, that results in the use of more material for a given purpose than heretofore required, becomes invalid for the duration of the emergency."

Other Action Completed or Pending

Supplementing the actions of the emergency committees as already indicated, reference should be made to other co-operative action on the part of the association in meeting problems growing out of the emergency, including that of the Committee on Track in developing an emergency provision with respect to the Portfolio of Trackwork Plans, and the co-operation of members of the Rail Committee with the War Production Board and the Office of Defense Transportation in studies of the question of released rail and of new rail allotments. With regard to the question of released rail, a special committee met with representatives of the War Production Board and other units of the Federal government to consider plans for the release of second-hand rail to the army and navy. Discussion at this meeting led to the adoption of the WPB order, later issued as L-88, under which the released rail (including scrap) of any road, to the extent of 90 per cent of the number of lineal feet of new rail purchased, can be disposed of only on the order of the WPB.

In the case of the rail allotment consideration, a special committee consisting of six members, two representing the Western, Southern and Eastern roads, respectively, assisted the Office of Defense Transportation in the allotment of rails to the railroads for their 1942 renewals. This committee met in Washington on April 27 and 28, held conferences with representatives of individual railway in Chicago on May 5 to 8, inclusive, and represented its recommendations to the ODT on May 12.

Trackwork Plans Abridged

With regard to trackwork plans, the Committee on Track reviewed critically the Portfolio of Trackwork Plans of the association and developed an emergency provision which places a limitation on the use of certain plans for the duration of the emergency, with the primary object of restricting the use of manganese steel. The substance of this provision, which was issued on March 19 as a yellow rider to the Portfolio, is as follows:

Trackwork Plans

Attention is directed to the recommendation of the Committee on Track dated March 19, 1942, to the effect that:

1. The use of the following plans be suspended for the duration of the war.
   Plan 220-42 Manganese Steel Points for Split Switches.
   503-40 Guard Rails, Tee Rail Design, with Planed Flares and Canted Plates.
   773-40 Solid Manganese Steel Crossings—Angles 40 deg. —25 deg., inclusive.
   774-41 Crossings with Solid Manganese Steel Frogs—Angles Below 25 deg. and above 14 deg. 15 min.
   775-41 Crossings with Solid Manganese Steel Frogs—Angles 14 deg. 15 min. to 8 deg. 10 min., inclusive.
   983-35 Solid Manganese Steel Frogs for 7-in. and 9-in. Girder Rails.
2. The portion of Plan 821-42 showing Rail-Bound and Solid Manganese Steel Knuckle Rails be suspended for the duration of the war.
3. The title of Plan 772-40 be revised to read "Solid Manganese Steel Crossings, Angles Below 60 deg. to 45 deg." for the duration of the war.

The Committee on Track has also recommended to the Emergency Committee on Roadway and Track Problems the adoption of a thoroughly considered procedure with respect to the furnishing of tie plates with the object of reducing the number of designs of plates that will be furnished during the war.

Suggestion on Rubber Conservation

Still other important action being taken by the association in the interest of imparting important information to those concerned as promptly as possible, is its plan, already in effect, of issuing circulars to the chief engineering officers of member roads, and in some cases to the purchasing and stores officers as well, covering not only the emergency provisions adopted, but also information of a general character dealing with conservation, substitution, reclamation and simplification. Typical of this supplemental service is the circular sent out on April 1, reporting the findings of a special committee appointed to give consideration to the conservation of rubber for those miscellaneous uses in connection with roadway and structures which had not been considered by a committee representing the Mechanical division, and another committee composed of representatives of the sections having to do with the use of electricity on the railways.

Those parts of this circular dealing with the purchase of materials containing rubber, and practices designed to reduce the demand for rubber, are reproduced in the following:

Recommendations Regarding Practice in the Purchase of Materials Containing Rubber, or for Which Rubber Is Sometimes Used

Gaskets

1-a. General—Specify prefabricated gaskets of substitute materials wherever possible.

1-b. Doors of Refrigerator Rooms—Should be furnished with gaskets made of substitute materials.

Packing for Pumps

2. Composition (material other than rubber) is now generally used.

Weather Strips

3. Use felt or other substitute materials.

Valves for Locomotive Sand Plants

4. All-metal valves can be substituted in new work, but the use of rubber cannot be avoided in replacements. Not a large item.

Rubber Gloves

5. For batteries and high-tension work, use types covered by Telegraph and Telephone section specifications. Such gloves cannot be dispensed with.

Rubber Boots

6. Governed by general trade practice. Must be provided for some classes of work.

Rain Coats

7. Substitute oilskins.

Bumpers and Shock Absorbers

8. For percussion tools. Substitute springs or other forms of shock absorbers where possible.

Water Columns—Water Tank Outlet Valves

9. Manufacturers contend that use of rubber has already been reduced to a minimum by the substitution of composition packing. However, something like 10 pieces of rubber, weighing about 4½ lb. total, are still required for water columns, and of this quantity about 2 lb. are in special molded forms requiring considerable new gum. These cannot be eliminated or altered without changes in the design of the facility which, of course, would not affect replacements of gaskets or packing on equipment now in service.

Power Tie Adzers

10. Guards around cutting heads are made of rubber known as "tire tread stock"—about 3,500 lb. used in 1941. Steel plate guards were used originally but are not nearly as safe in stopping flying gravel, pieces of spike stubs, etc. A saving in rubber can be made here, but at some sacrifice of safety.

Practices Designed to Reduce the Demand for Rubber by Increasing Service Life

General—Purchase of the best quality of rubber goods will usually insure lowest consumption of a given quantity of rubber.

Practice Designed to Reduce Use of Rubber

Hose

1-a. Protect against wear, injury from rough handling and burning. Avoid exposure to the hot sun or other sources of high temperature and keep away from oils or greases.

1-b. Substitute pipe with flexible joints or pipe with shortest possible lengths of hose.

1-c. Avoid need for replacements as long as possible by cutting off damaged ends or cutting out injured section and splicing.

1-d. Where possible, hose should be drained, coiled and properly protected against damage and theft when not in use.

1-e. Use the proper type of hose for the work undertaken. Avoid placing low-pressure hose on high-pressure lines. Do not use steam in water hose.

Belts

2-a. Protect against wear. Use dressing to prevent slipping.

2-b. Avoid renewals by patching and splicing. However, endless belts, which cannot be spliced, will give longer life than a spliced belt.

2-c. Protect belts from dampness or exposure to weather.

Gaskets

3-a. Use the correct type and shape of gasket for a particular location. In dismantling a line, remove gaskets carefully so they may be reused. It should rarely be necessary to replace gaskets if care is taken in loosening joints.

3-b. Use prefabricated gaskets wherever possible instead of cutting them out of sheet rubber. Prefabricated gaskets are far superior to gaskets cut from a rubber sheet, which is a wasteful practice.

3-c. Use roofing paper, asbestos sheets or white lead on canvas, where possible.

Pump Packing

4. Install carefully and apply no more pressure than is necessary to avoid leaks. Do not attempt to prevent leaks due to scored rods and plungers by applying excessive pressure. True up the rods.

Plumbing

5-a. Endeavor to control use so as to avoid abuse. Consider greater use of locks on toilet facilities to confine use to railroad patrons, and educate employees.

5-b. Make canvass of fixtures on property to ascertain extent of possible surplus and take unnecessary units out of service so that parts may be used for replacements.

5-c. Use reversible rubber flush balls in water closet tanks, thereby increasing the service life of flush balls.

Rubber Boots

6-a. If practicable, furnish knee length boots for work in water that does not make hip boots necessary.

6-b. Provide guards for application either to shovels or to boots that will prevent wear or cutting of the boots when stepping on the shovel.

6-c. Protect boots from damage or rough handling on the job or while being taken to and from the work, and see that they are stored properly when not in use.

Rubber Gloves

7. Some railroads are reclaiming punctured gloves by vulcanizing.

In submitting these recommendations to member roads, it was urged that they carry them out in so far as they might prove practicable on the different properties, it being pointed out that the railroads should have a leading part in the program of the country for the conservation of rubber.

Other Suggestions Transmitted

On May 4, carrying further its policy of disseminating promptly emergency committee recommendations and other helpful information, the association sent out a second circular of recommendations for the conservation of other critical materials, based on the work of its committees, urging that member roads carry out the recommendations in so far as possible. The context of this circular, dealing with bridges, culverts, fence posts and track, was as follows:

Bridges

Use wood or concrete in all cases where steel is not absolutely imperative. Concrete designs should be such as to require a minimum of reinforcement. In necessary steel designs use medium steel only (ASTM A7-39).

Culverts

The use of steel or cast iron pipe must be avoided. Use wood, concrete or vitrified clay pipe—See AREA Specifications for Vitrified Clay Pipe Culverts adopted in March, 1942 (AREA Supplement to Manual—1942).

Fence Posts

Use wood posts—See AREA Specifications for Wood Fence Posts, adopted March, 1942 (AREA Supplement to Manual—1942).

Track

A potential shortage of manganese demands the utmost economy in the use of this material. The Committee on Rail has carefully considered the feasibility of a reduction in the manganese content of rail steel, but, because of the hazard to defense traffic involved on any adjustment of the chemistry of rail steel, it was forced to recommend against any change at this time. On the other hand, the Committee on Track, which concurrently studied the use of manganese steel in special trackwork, definitely recommends that designs involving the use of manganese steel be confined to locations imposing exceptionally severe service.

How to Study Requirements for Diesel Switchers

The presentation of a typical application report as made for the installation of Diesel-electric locomotives replacing steam in a specific yard operation

By A. H. Candee

Transportation Engineer, Westinghouse Electric & Manufacturing Co.

THE actual operation of hundreds of Diesel-electric switching locomotives in the railroad yards of the United States has shown that this type of switching motive power is not only more economical than its steam predecessor, but will handle more cars per day per locomotive. In these times of peak traffic and yard congestion, the latter characteristic is of vital importance in our war effort.

The acquisition of Diesel motive power to replace steam switchers may help the railroad traffic conditions in another way. There are many 2-8-0 type steam locomotives now performing switching work which could be released by Diesels and which could then be used to assist the railroads' hard pressed road power. The fact that a Diesel can outperform a steam switcher means that the number of steam locomotives released for road work may be considerably greater than the number of Diesel units acquired to replace them. Illustrative of this is one of many application studies made by the Westinghouse Electric & Manufacturing Company in collaboration with the Baldwin Locomotive Works to determine how many locomotives could be released for road freight hauls and what switching economies would result therefrom.

In considering economies at this time, it may be considered that any saving which may be made represents man-hours of time saved somewhere along the line, thus permitting overburdened railroad operating and maintenance forces to use this time for other urgent and essential tasks.

The application study which is shown here is typical of many such locations. Since it is the policy of the two companies making this study not to reveal a railroad's cost or operating figures, received in confidence, it has been necessary to disguise the name of the railroad and city, locomotive numbers, locations and similar identifying data. Otherwise, the analysis is true to the original report submitted to the railroad, although descriptions of the service (known to the railroad and therefore not necessary to include in a report to them) have been slightly expanded.

In making a study of this nature, it is essential that observations of the switching operations be made and that the work done by each crew be known. It is also necessary that severe operating conditions and the performance of existing steam power in these services be studied. Clearance, trestle, and bridge limitations must be determined.

For the purpose of substitution, of course, the performance limitations of the available Diesel motive power must also be known.

The data to be collected to form a basis for a report of this kind should include:

Present wage scales for enginemen, firemen, ground crew foremen and helpers.
Crew assignment for a typical busy day, plus overtime.
Locomotives available for switching service.
Origin of coal and cost delivered to the railroad.
Annual coal consumption for a normal year.
Annual locomotive hours for the same year.
Average cost of turning an engine.
Cost of switching locomotive lubrication per mile or hour.
Cost of "Other Supplies" per locomotive mile or hour.
Cost of water per 1,000 gallons.
Running repairs per hour or mile, averaged for a year.
Class repairs for each locomotive including at least one Class 3 or heavier, with corresponding hours or miles.

Typical Application Report

The Baldwin City switching operation of the Great Lakes and Midwest involves passenger station work, classification work, industrial switching and freight transfers. The concentration of this work in two general areas—Valley Yard and the Ninth-Nineteenth street district—makes the substitution of Diesel switching locomotives for steam switchers advantageous.

The use of three 660-hp., 100-ton and eight 1,000-hp., 120-ton Diesel-electric locomotives will release the following:

1—0-6-0 steam switcher
9—2-8-0 steam switchers
8—0-8-0 steam switchers
6—switching crews
Shop and enginehouse man-hours.

The eight-wheel switchers may be substituted for 2-8-0 type locomotives in switching service at other points thus releasing a total of 17 locomotives which may be used for road freight

Table I—Application of Three 660-Hp. and Eight 1,00-Hp. Diesel Switchers

Comparative Costs—Steam and Diesel

	Steam	Diesel 660-hp.	Diesel 1,000-hp.
Crew wages—assigned time	$5.248	$5.228	$5.267
Crew wages—overtime	7.871	7.843	7.900
Fuel	.772	.300	.300
Lubrication	.058	.045	.045
Water	.033	0	0
Other supplies	.034	.010	.010
Enginehouse expense	.785	.589	.589
Repairs—running and class	1.260	.450	.500
Cost per assigned hour	$8.190	$6.622	$6.711
Cost per overtime hour*	10.028	8.648	8.755
Assigned hours per year	105,000	24,600	65,600
Overtime hours per year	2,700	.....	.....
Necessary steam hours	.....	1,700	4,400
Total operating cost per year	$887,025.60	$176,824.20	$476,277.60
Annual saving by Diesels		$233,923.80	
Per cent return on locomotive investment		28.98	

* Enginehouse expense not included.
(NOTE:—See Appendix A for derivation of all figures.)

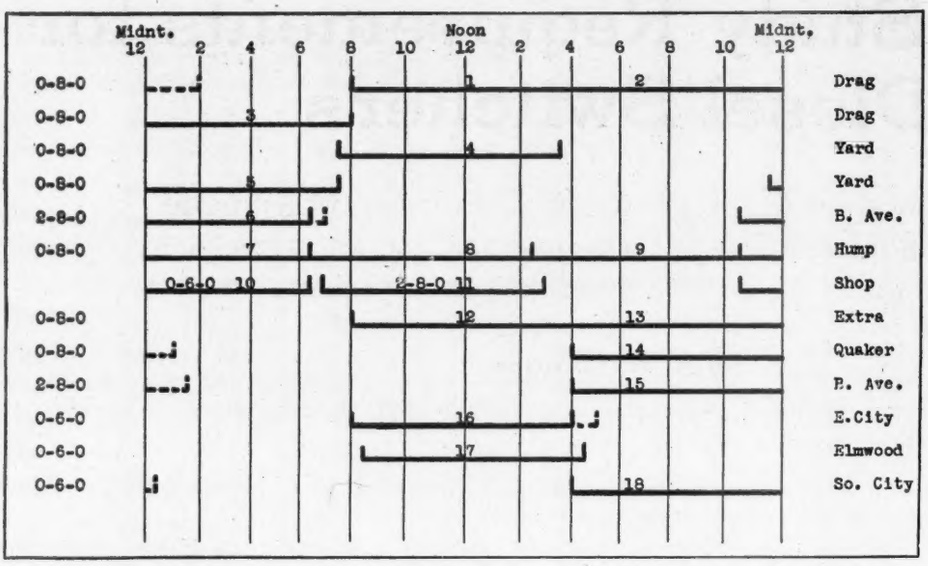


Fig. 1—Steam Locomotive Assignments for the Month of April at Valley Yard Enginehouse

work. The crews released will compensate in part for the additional road crews required. Also every man-hour saved in the shop and enginehouse assists the overburdened force and will reflect in improved maintenance of the steam road power.

The substitution of Diesels will effect a reduction of approximately $233,900 annually in operating expenses, corresponding to a 29 per cent return on the investment in Diesel power. Detailed figures are shown in Table I.

One method of financing the purchase of Diesels is shown by Appendix B.

General Statement of Operation

The switching service at Baldwin City includes passenger-station work, flat and hump classification work, industrial switching, freight-house and team-track service, and freight transfers. There are four general switching areas in Baldwin City: the passenger station and an adjacent freight yard; the Valley yard; the Nineteenth street yard; and the Ninth street yard. The Ninth street and the Nineteenth street yards are practically contiguous and are adjacent to the main line, which passes through the city from north to south approximately one half mile west of the business district. The passenger station is nearly one mile due south of the business district (approximately a half mile east of the main line) and main line passenger trains back into or out of the station.

The Valley yard which includes a freight classification hump, is approximately two miles northeast of the business district and is along the Thomas River division, which passes the passenger station and joins the main line near Ninth street. From

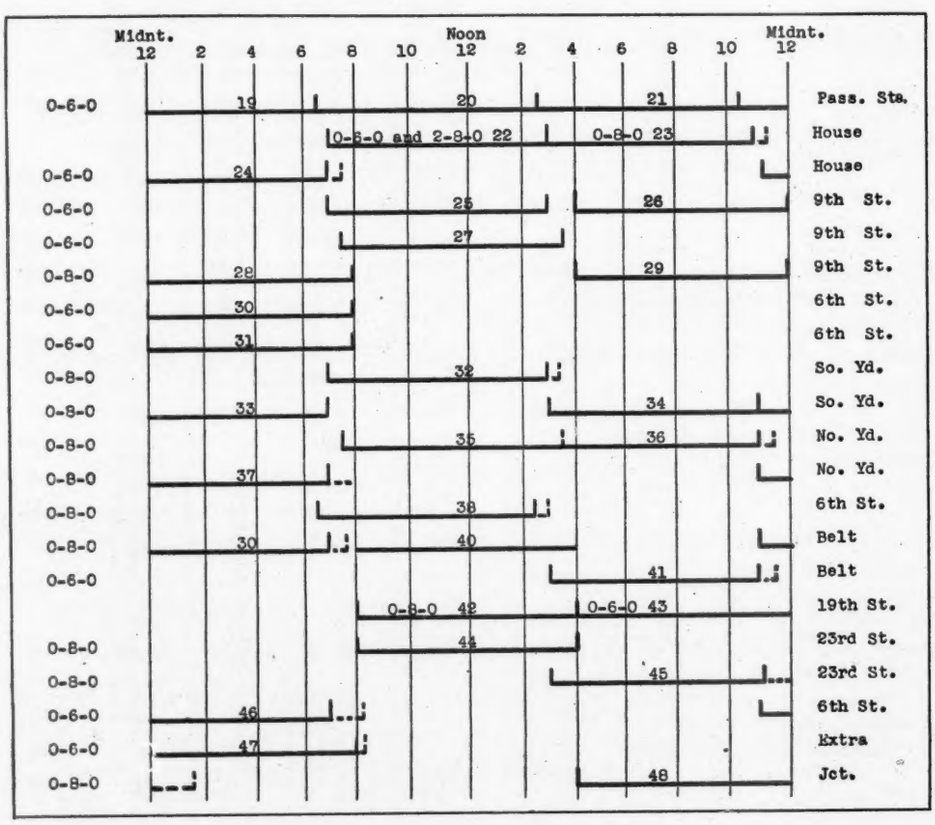


Fig. 2—Steam Locomotive Assignments for the Month of April at Ninth Street Enginehouse

the Valley yard, a line extends to the industries at North Baldwin (approximately 15 miles). One steam switcher is assigned permanently to North Baldwin and is not included in this survey. There is also a belt line from Valley yard to the main line at Thirty-first street, with industries along this route. Transfers between Valley yard and Nineteenth street are over the Thomas River division tracks.

The Nineteenth street yard is the main-line receiving and departure yard and is flat. It is located approximately two miles south of the Baldwin City business district. The Ninth street yard is north of the Nineteenth street yard (about ¾ miles south of the business district) and serves the industries northward along the main line, also the freight house and team tracks located adjacent to the business area.

There are two enginehouses in Baldwin City—one near the Valley yard and one near the Ninth street yard. One of the G. L. & M. shops is also located at Valley yard.

Steam Locomotives in Use

The following steam switching locomotives were located in the Baldwin City area in April, 1942:

6-Wheel		2-8-0		8-Wheel	
224	327	995	1388	1539	1632
229	341	1211	1390	1540	1635
241	360	1327	1392	1556	1636
272	363	1370	1394	1559	1650
303	365	1380		1584	1651
326				1587	1653
				1598	1656
				1631	1657

Steam Locomotive Assignments

Fig. 1 shows the assignments out of the Valley yard enginehouse on April 21, 1942, while Fig. 2 shows similar dispatches from the Ninth street enginehouse on the same day. These assignments comprise 45 regular and 3 extra tricks, employing 25 different steam locomotives.

Selection of Diesel Locomotives

Diesel locomotives of the 1,000-hp. 120-ton size will perform all of the services to which 8-wheel and 2-8-0 steam switchers are now applied, with the possible exception of the drag (transfer) service, and will handle the heavy yard work at Valley Yard and in the area from Third street to Thirty-first street, along the main line, much more expeditiously than steam. Likewise, 660-hp., 100-ton Diesels may be used to replace six-wheel and 2-8-0 switchers in the lighter yard and industrial work. The short rigid wheelbase of the Diesels makes it possible to use them in all types of service encountered at Baldwin City.

Diesel Locomotive Assignments

A careful study of each assignment indicates that the faster work performed by Diesels will permit the elimination of all extra tricks, most of the overtime, and three of the regular tricks in the Ninth-Nineteenth-street area. There are:

Sixth street, 11:59 p.m. to 7:59 a.m., 0-6-0 locomotive.
Nineteenth street, 8:00 a.m. to 4:00 p.m., 0-8-0 locomotive
Nineteenth street, 4:00 p.m. to 12:00 m.n., 0-6-0 locomotive

Fig. 3 shows the assignments when the switching service is Dieselized. It is proposed to retain steam for those assignments where full utilization of the Diesel cannot be effected. Steam is also to be retained for relief and protection of the Diesel motive power.

With the three regular and three extra tricks eliminated, there will still be two 660-hp. Diesels in the Sixth street area from 11:00 p.m. to 7:00 a.m. and 12:00 m.n. to 8:00 a.m. respectively. At Nineteenth street there will be a 1,000-hp. unit in the south yard and one in the north yard at all times, and these should be able to take care of all of the work. In case of congestion at Nineteenth street, Diesels operating in Ninth street assignments may help.

Economic Comparison

Table I shows the relative cost of operation of those steam locomotives which may be displaced by Diesels and the cost of operating the Diesel units which replace them. Such assignments as will not be affected by the use of Diesel power have not been included in this cost comparison.

Table I indicates that the annual operating saving effected by the use of three 660-hp. and eight 1,000-hp. Diesel switching locomotives approximates $233,900, representing 29 per cent on the investment in Diesel power.

It is recommended that three 660-hp. 100-ton and eight 1,000-hp. 120-ton Diesel locomotives be acquired for operation at Baldwin

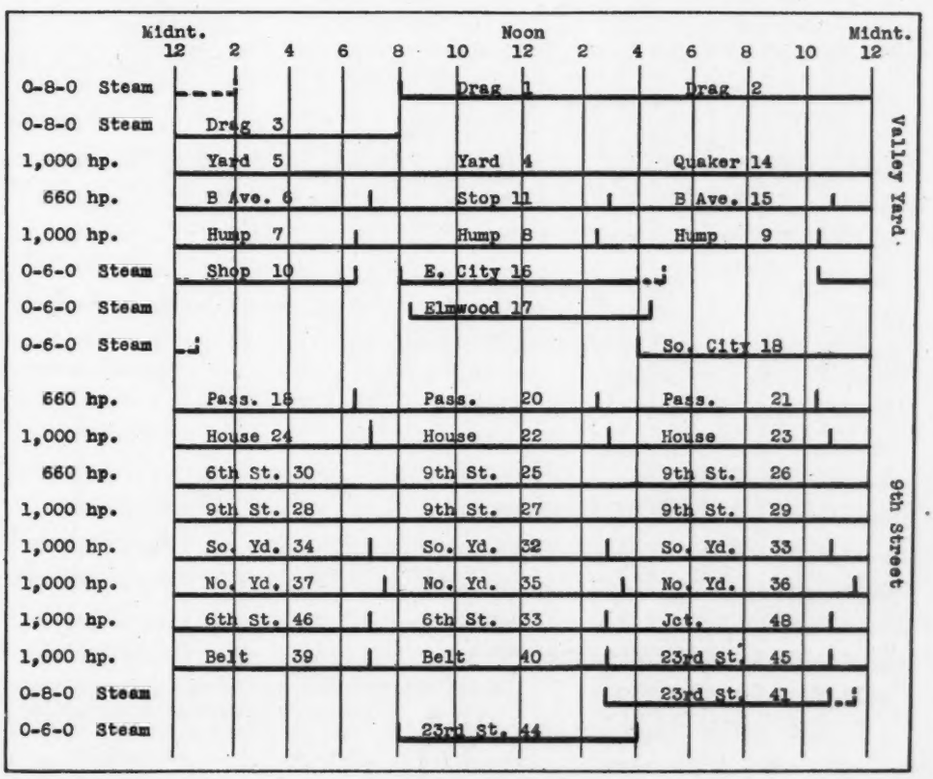


Fig. 3—Proposed Diesel-Electric and Steam Locomotive Assignments for the Entire Baldwin City District

City. This will release one six-wheel, nine 2-8-0, and eight eight-wheel steam locomotives for use elsewhere on the railroad.

Appendix A—Derivation of Figures for Table I

Wage Rates

The standard daily wage rates on steam switchers are:

	6-wh.	2-8-0	8-wh.
Engineman	$8.53	$8.53	$8.70
Fireman	6.95	6.95	7.07
Foreman	8.34	8.34	8.34
Two helpers	15.64	15.64	15.64
	$39.46	$39.46	$39.75

Assuming approximately equal division of eight-wheel and lower rate switching, also adding 6 per cent payroll charges, this figures $41.98 per day, or $5.248 per hour. Overtime is 50 per cent greater, or $7.871 per hour.

Standard daily wage rates on Diesel switchers, based on weights on drivers (nominal 100-ton unit is a 198,000-lb. locomotive) are:

	660-hp.	1000-hp.
Engineman	$8.53	$8.70
Fireman	6.95	7.07
Foreman	8.34	8.34
Two helpers	15.64	15.64
	$39.46	$39.75
Adding 6 per cent per day	41.83	42.14
Per hour	5.228	5.267
Overtime, per hour	7.843	7.900

Cost of Fuel

Records for 1941 show 43,003 tons of coal consumed for 129,769 switching hours, or an average of 663 lb. of coal per hour. Coal cost is $2.21 per ton (including handling) delivered to the railroad and the company haul to Baldwin City is 41 miles. At a company-haul cost (not freight rate) of $0.003 per ton per mile, this adds $0.12 to the cost per ton, thus making the coal cost $2.33 per ton. The hourly cost (663 lb.) is $0.772.

G. L. & M. system average for the operation of other Diesel switchers shows a ratio of 1 gallon of Diesel fuel to do the same switching work at 134 lb. of steam locomotive coal. On this basis, this indicates an average of 5 gal. of Diesel fuel per hour. This is low where 1,000 hp. Diesels predominate, so use 6 gal. per hour average for 660 hp. and 1,000 hp. At $0.05 per gallon (the prevailing price at Baldwin City is lower than this) this figures $0.30 per hour.

Lubrication

G. L. & M. system average for steam switchers is $0.058 per hour.

Normal lubrication cost for Diesels is 10 per cent of the fuel cost. To be safe, use 15 per cent; 15 per cent of $0.30 is $0.045 per hour.

Cost of Water

Switching-power water costs cannot be segregated. Assume 7 lb. of water used per pound of coal, or 560 gal. per hour. Water at Valley yard costs $0.07 per thousand gallons and $0.05 per thousand at Ninth street. The average is $0.06 and 560 gal. cost $0.033 per hour.

The water used on Diesels is negligible.

Other Supplies

G. L. & M. system average is $0.034 for switching locomotives.

G. L. & M. system average for all Diesels now operating is $0.0091 per hour. Say $0.010 per hour.

Enginehouse Expense

The average cost per dispatch for 1941 at Baldwin City is $6.280, or $0.785 per assigned hour. In figuring overtime hour cost, do not add this expense.

Auditors' figures show enginehouse expense for Diesels at approximately 30 per cent of the steam cost. However, this is not a true picture of the actual saving, since part of the reduction has been transferred to steam switchers. To be safe, take Diesel enginehouse expense at 75 per cent of steam expense, or $0.589 per hour.

Cost of Repairs

1941 running repairs were averaged for all switching locomotives and adjusted for 1942 wage rates. Class repairs were totaled over a long period of operation for each locomotive at Baldwin City (likewise being adjusted for present wage rates) and the average per-hour cost obtained. Adding running repairs, class repairs and shop charges gave a cost of $1.260 per hour.

G. L. & M. system average when adjusted for 1942 wage rates shows a Diesel locomotive repair cost of $0.3246 per hour for 1941, including both 660-hp. and 1,000-hp. sizes. Since Diesel switchers are not more than two years old, this figure is low. Use $0.450 per hour for 660-hp. units and $0.500 for the 1,000-hp. size to cover repair expense over a long period of years.

Hours of Service

The following tricks, now operated by steam will be eliminated by Diesels (See Fig. 1, 2, and 3):

0-6-0		2-8-0	0-8-0			
19	37	6	4	13	29	37
20	30	11	5	14	32	38
21	31	15	7	22	33	39
24	43		8	23	34	40
25	46		9	27	35	42
26	47		12	28	36	45
						48
12 tricks		3 tricks	25 tricks			
28,000 hrs.		7,500 hr.	69,500 hr.			
600 hr. o.t.		600 hr. o.t.	1,500 hr. o.t.			

Total, 105,000 regular and 2,700 overtime hours

The following tricks will be operated by the Diesel-electric switchers.

660-hp.			1000-hp.			
6	19	25	4	22	32	38
11	20	26	5	23	33	39
15	21	30	7	24	34	40
			8	27	35	45
			9	28	36	46
			14	29	37	48
9 tricks			24 tricks			
26,300 hr.			70,000 hr.			
Diesel 24,600 hr.			65,600 hr.			
Relief 1,700 hr.			4,400 hr.			

This is high steam relief time, to be safe.

Steam Power Released

After Diesel locomotives are installed the disposition of the steam locomotives formerly employed in the Baldwin City yards will be as follows.

Steam tricks after Dieselization	Locomotives used		
	0-6-0	2-8-0	0-8-0
1-2-3	..	..	2
10-16-17	2	..	..
18	1	..	..
41	..	..	1
44	1	..	..
Total in regular use	4	..	3
Spares at Valley yard	3	..	3
Spares at Ninth street	3	..	2
Total, including spares	10	..	8
Available (April, 1942)	11	9	16
Release	1	9	8

Appendix B—Financing Diesel Switching Locomotives

Assume that all of the purchase price is borrowed at three per cent interest, to be paid off in eight equal annual installments.

Purchase price of three 660-hp. locomotives	$179,250
Purchase price of eight 1,000-hp. locomotives	628,000
(A) Total price	807,250

Borrow for locomotives (Item A)	807,250
Borrow for insurance (1 per cent of Item A)	8,073
Borrow for first year interest (3 per cent of total	25,216
(B) Total to be borrowed	840,539
(C) Annual payment (1/8 of Item B)	105,067
(D) Amount due start of second year (B-C)	735,472
Annual payment (Item C)	105,067
Insurance and taxes (2 per cent of Item A)	16,145
Average interest over seven years (1.5 per cent of Item D)	11,032
(E) Total yearly cash necessary	132,244
Annual operating saving (from report)	233,900
Annual cash expenditures (Item E)	132,244
(F) Net annual cash surplus first eight years	101,656
Annual operating saving (from report)	233,900
Insurance and taxes (two per cent of Item A)	16,145
(G) Net annual cash surplus after eight years	217,755
Total cash surplus first eight years (8 x Item F)	813,248
Total cash surplus next 12 years (12 x Item G)	2,613,060
(H) Total cash surplus over 20-year life	3,426,308

Shows Public Aids to Rail and Air Carriers

WASHINGTON, D. C.

CONTINUING preparations for next week's hearings in connection with its study of public aids to transportation, the Board of Investigation and Research created by the Transportation Act of 1940 distributed during the past week some of the exhibits which its staff has been preparing on government assistance to railroads and air carriers. Like the previously-issued highway and waterway exhibits (see *Railway Age*, June 20, page 1184), the railway and air carrier exhibits will be presented at the hearings which are to be held in the Departmental Auditorium on Constitution avenue, between Twelfth and Fourteenth streets, Washington, D. C., beginning June 29.

The railway exhibits cover the public aid involved in loans to railroads and purchases of their securities by the Reconstruction Finance Corporation and the Public Works Administration. The Board's staff has not yet completed the presentation it will make on land-grant aid to railroads, while only preliminary studies have been made concerning "the element of public aid to railroads which may be involved in the financing of grade crossing separations between railways and highways, and in the financing of railway bridge alterations and relocations occasioned by waterway improvements." Also "in a preliminary stage" is an inquiry "to determine whether an element of public aid is or has been provided in railway mail rates."

The airway exhibits released comprise a set of eight compilations of data on the cost to the federal government of providing the domestic civil airways system for the years 1926 to 1941, inclusive; and other data, covering the 1938-1941 period, on the excess of air-mail payments over the cost to air carriers of handling mail. Also the set includes four exhibits on capital expenditures, income, expense and traffic data for publicly owned airports for the years 1937 and 1938. When the latter are expanded to cover all the years of the 1936-1940 period, "annual costs will be computed and allocated between scheduled air carriers and others." Still to come is an exhibit setting forth the Postoffice Department's financial operations in connection with airmail service, i.e., the air-mail revenues, payments to carriers, and other governmental expenses attributable to the service. Like the highway and waterway exhibits, each railroad and air carrier exhibit is labeled as "a preliminary statement" which was prepared by the Board's staff, but which "has not been approved by the Board."

R.F.C. Aid to Railroads

The compilation on R.F.C. aid to railroads shows that as of April 30, 1942, loans aggregating $954,481,671 had been authorized, while actual disbursements on such authorizations totaled $834,735,175. The balance outstanding as of April 30 was $462,082,477. Total R.F.C. earnings from interest accruals and retirement of the rail loans at a profit have been $162,658,990.37. The interest cost of the money to the R.F.C. was $74,092,-816.35, while its cost of administering the rail loans is put at $5,317,665.22, leaving net earnings of $83,248,-508.80 before allowance for losses. The exhibit's comment suggested that it seemed reasonable to assume that the R.F.C. would probably lose the $137,328,165 in principal and $29,627,955.19 in interest which were in default as of April 30. "In the event that this should prove to be true," the comment continued, "the net earnings of $83,248,508.80 to the R.F.C. on railroad loans would be converted to a loss of $83,707,611.39. If any of the other outstanding loans should be defaulted, the loss to the government would be increased accordingly."

Mention is also made of how the R.F.C. has aided railroads by guaranteeing $6,020,000 of their securities. Up to April 30, the lending agency had received $90,-595.37 in fees for such services. There were no defaults of the guaranteed securities, of which only $443,000 remained outstanding on April 30. The exhibit's comment refers in closing to contentions that the aid should be measured by benefits received by borrowers rather than by the net cost of the aid to the government. Because of the difficulties in measuring "even roughly" the costs of alternative sources of capital, no estimate of public aid to borrowers, from the standpoint of savings to them, was attempted.

The P.W.A. Loans

The exhibit on railroad loans by the Public Works Administration shows that P.W.A. thus advanced $200,-974,500. All securities taken for such loans were later sold to the R.F.C., except $84,000 which had been repaid to P.W.A. It is calculated that the P.W.A. phase of these transactions resulted in a deficit of $7,596,708.25, explained in part by the fact that borrowers were allowed one year of free interest. After the loans were transferred to the R.F.C., however, the earnings from interest and premiums amounted to $14,798,473.93 up to last April 30. After deducting interest costs to the R.F.C. the net earnings were $9,346,936.27 before any allowance for losses. Also deducted are loans in default amounting to $4,003,747.44 and unpaid interest of $221,-323.45, bringing the net earnings down to $5,121,865.38. From these net earnings to the R.F.C., the aforementioned P.W.A. deficit of $7,596,708.25 is deducted to show "a net deficit of $2,474,842.87 on the original P.W.A. loans from the date of disbursement to April

30, 1942." Here again no attempt was made to measure the aid from the P.W.A. loans in terms of what the carriers would have had to pay for the money elsewhere.

As indicated above, the Board's staff has not completed the preparation of the presentation it will make with respect to land-grant aid to railroads. On that matter the statement accompanying the present railway exhibits had this to say:

The results of a detailed study of early developmental aids to the railroads are included in Volume II of a report by the Federal Coordinator entitled "Public Aids to Transportation," which was released in 1940. It has not been considered necessary or desirable to duplicate the exhaustive search for data which was made in connection with the aforementioned study. Where necessary, however, investigations covering the period since the terminating year of the Federal Coordinator's study are being made. In every instance, methods of evaluating the public aids to railroads will be re-examined.

The report of the Federal Coordinator on federal and state land grants covered, for the most part, the period to December 31, 1927. The Board has called upon those railroads which are recorded as holding land grants on December 31, 1927, to show all changes which have occurred in the status of such lands between December 31, 1927, and December 31, 1941. Along with other changes, these returns are expected to provide information on the release of claims to lands, as required by section 321(b) of the Transportation Act of 1940. Reports received from railroads in regard to these claims will be checked with records in the Land Office of the Department of the Interior. This investigation of land grants is expected to reveal the acreages of grant lands still held by or for individual railroads on December 31, 1941, and will be useful in connection with consideration of the proposal to eliminate rate deductions on military traffic of the federal government. The Board is also endeavoring to obtain as much information as it can regarding the total of such rate deductions, especially for recent periods.

In addition to the land grants, railroads received right-of-way grants of land in the early days from the federal as well as other units of government. Data regarding these right-of-way grants are shown in the report of the Federal Coordinator. Steps are being taken to ascertain the acreage of right-of-way grants involved in railroad abandonments since December 31, 1927. By this procedure it is expected to determine the acreage of right-of-way grants held on December 31, 1941, by active railroads, and a valuation will be made of these lands which continue to be used for carrier purposes.

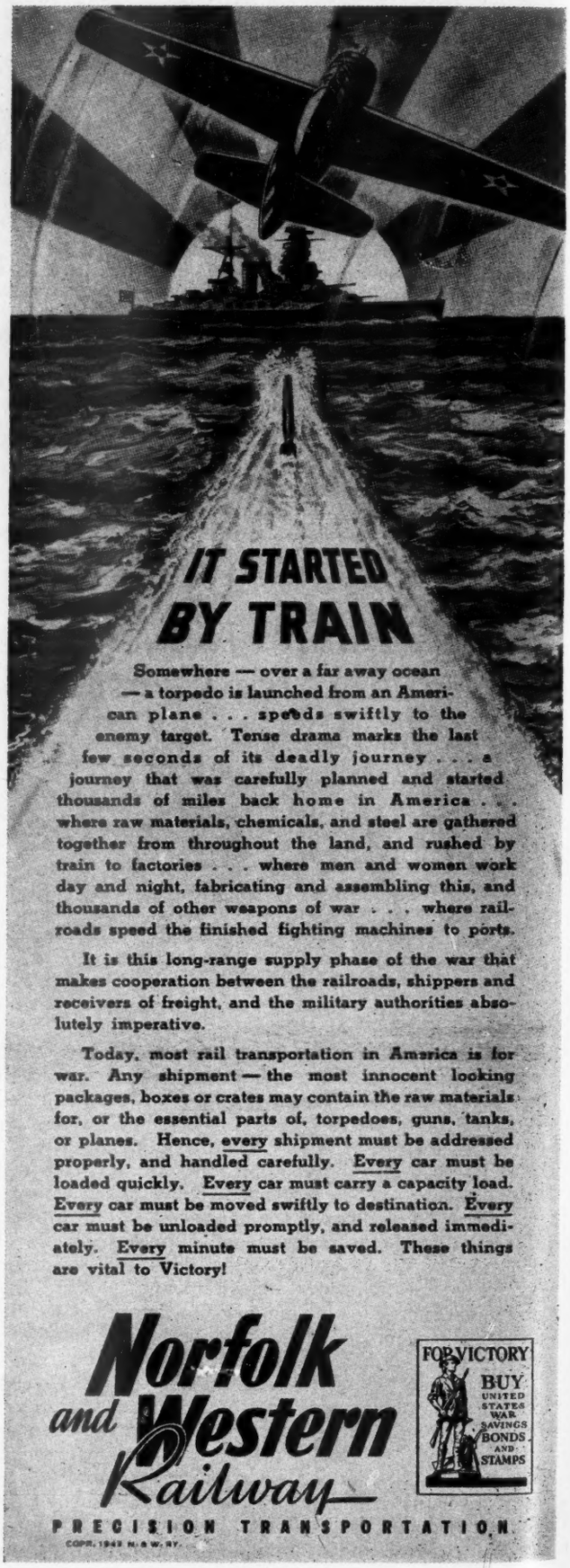
Various other gifts, grants, aids and donations were made to railroads, especially during the period of railroad construction, by state and local governments. Data pertaining to these aids are contained in the aforementioned report of the Federal Coordinator. A test check of reports filed by the railroads with the Interstate Commerce Commission indicates that no substantial amounts of additional aids of this sort have been made to railroads in recent years.

Exhibits on Air Carriers

Data in one of the exhibits on public aids to air carriers show that from 1926 through 1941 the federal government spent a total of $131,775,641 for construction, operation and maintenance of the domestic civil airways system. The total for 1941 was $20,689,395, broken down as follows: Maintenance and operation, $8,916,652; administrative expenses, $675,587; teletype circuit rentals, $1,414,462; miscellaneous expenses, such as Weather Bureau communications, research, aero mapping and airport service, $522,445; expenditures by the Weather Bureau $3,465,322; investment—new construction and reconstruction, $5,694,927.

In 1941 the air lines received in air mail payments an excess of $14,724,360 over operating expenses allocated to mail. If an allowance for a return of 12 per cent on net operating assets be included the excess was $14,232,107, or 6.3 mills per pound-mile of mail carried.

WAR-SLANTED Advertising of the N. & W. Spreads Understanding of Integral Participation of Railroads in Our Military Effort


IT STARTED BY TRAIN
Somewhere — over a far away ocean — a torpedo is launched from an American plane . . . speeds swiftly to the enemy target. Tense drama marks the last few seconds of its deadly journey . . . a journey that was carefully planned and started thousands of miles back home in America . . . where raw materials, chemicals, and steel are gathered together from throughout the land, and rushed by train to factories . . . where men and women work day and night, fabricating and assembling this, and thousands of other weapons of war . . . where railroads speed the finished fighting machines to ports.
It is this long-range supply phase of the war that makes cooperation between the railroads, shippers and receivers of freight, and the military authorities absolutely imperative.
Today, most rail transportation in America is for war. Any shipment — the most innocent looking packages, boxes or crates may contain the raw materials for, or the essential parts of, torpedoes, guns, tanks, or planes. Hence, every shipment must be addressed properly, and handled carefully. Every car must be loaded quickly. Every car must carry a capacity load. Every car must be moved swiftly to destination. Every car must be unloaded promptly, and released immediately. Every minute must be saved. These things are vital to Victory!
Norfolk and Western Railway
FOR VICTORY BUY UNITED STATES WAR SAVINGS BONDS AND STAMPS
PRECISION TRANSPORTATION
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The Baltimore & Ohio Concentrates Delivery of L. C. L. Shipments For Manhattan, Brooklyn and the Lower Bronx at Pier 22 North River

B. & O. Revamps Lcl Routing at NY

Merchandise traffic handled as simply and expeditiously as possible in serving the metropolis

TO meet the needs of exacting wartime traffic, the Baltimore & Ohio has recently set up an entirely new system of handling l. c. l. shipments into New York City. The change consists in part of the centralization of termini for trucks rendering pickup and delivery and simplification of routes and elimination of duplication. As this involves a change in waybill routing, R. L. Schill, manager station operations, Baltimore, Md., has issued an 18-page loose-leaf guide containing instructions for waybilling and a directory of streets and avenues in the city, which has been distributed to 11,000 to 12,000 offices, including shippers, B. & O. agents and 1,500 agents of connecting roads.

New York "Juicy" But Hard to Serve

Greater New York has a population of 7⅓ million, equal to the combined populations of Maryland, Indiana, West Virginia and Delaware. Further, these figures do not account for the position of the city as a distribution center for a much larger tributary population. In extent the incorporated city proper covers 310 sq. mi. This area, most of which is insular in character, makes the distribution of l. c. l. freight to ultimate consumers a difficult job for the railroads. But the richness of the market is well worth management's best efforts.

Formerly, considerable B. & O. l. c. l. traffic to New York was handled via Elizabethport, N. J. (about 12 mi. from New York) where it went over the transfer platforms and was loaded into separate cars for various destinations in the city. Shipments to Manhattan borough were floated over the Hudson river to Pier 22. The bulk of shipments to Brooklyn were handled by the so-called "contract terminals" which serve that borough, although a portion thereof were handled by B. & O. carfloat to Wallabout terminal. Shipments to Bronx and Queens boroughs were interchanged with the New York Central, Central of New Jersey, New York, New Haven & Hartford and Long Island.

This universal transfer at Elizabethport plus interchange by carfloat with other roads plus further transfer caused vexing delays. The defects of these routings became particularly glaring when the road greatly improved the road time of l. c. l. freight. Why save transit days by "rolling the wheels off" on the road when terminal "meandering" neutralized the effort?

B. & O. Reorganizes Distribution System

Hence the B. & O. has entirely reorganized its New York distribution system along lines aiming at as direct handling as possible. First step was the elimination as far as possible of the transfers at Elizabethport and the substitution of through cars to New York destinations from important "break-up" points like Connellsville, Pa., Wheeling, W. Va., and Cleveland, Ohio.

Next step was the re-classification of New York destination points into seven groups, as shown on the accompanying map. Agents were instructed to waybill l. c. l. shipments on (in the absence of shipper-specifications) and shippers urged to specify, the following routings:

Group (1). All of Manhattan borough and Bronx south of 170th street. Waybill to Pier 22, North river.

Groups (2). Brooklyn borough. Waybill to Pier 22,

N. R. Exceptions are goods specifically consigned via contract terminals. These are interchanged, as before, by carfloat and delivered by the terminals.

Group (3). Upper Bronx. Waybill to Fordham station via N. Y. C. or Harlem river station via N. Y. N. H. & H. Cars are floated to interchange points.

Group (4) Queens. Waybill to designated station via L. I. Cars are floated to Long Island City.

Group (5) Staten Island. Waybill direct to designated station via Staten Island Rapid Transit (a B. & O. affiliate having direct railroad connection via Cranford junction, N. J.).

Group (6). Welfare, Ward's, Randall's and Governor's islands (not named on map). Waybill to Pier 22, N. R.

Group (7). East Bronx and territory south of Westchester avenue. Waybill to Bronx terminal station via C. of N. J. Cars are floated.

Pick-up and delivery service is afforded to l. c. l. shipments originated at or destined to points in groups 1 and 2 by trucks operated under contract for the B. & O. and in groups 3, 4 and 5 by trucks operated under contract for the various railroads with which the shipments are interchanged. No p. & d. service is operated in groups 6 and 7.

Insofar as p. & d. operations are concerned, the chief feature of the new routing scheme, it is evident, is the handling of traffic for a wider area at Pier 22 than formerly, thereby giving a much larger number of consignees the advantage of direct, through car service. Also this greater concentration makes possible a more rational organization of truck routes with a minimum of duplication.

At present 24 routes are operated out of Pier 22. On each of these certain trucks are loaded from midnight to departure time at 8 a. m. to assure early morning deliveries to consignees. Routes in Manhattan are operated by the Railway Express Agency and Gilroy Warehouse Trucking Co.; routes in lower Bronx by the Empire Express, Inc., and routes in Brooklyn by the Albino Trucking Company.

The Agency operates a large fleet of trucks in and out of Pier 22. In addition, to handle the l. c. l. shipments of shippers and consignees who elect to arrange cartage themselves to other freight terminals of the B. & O. in Manhattan, the R. E. A. operates 5 tractors and 18 to 20 trailers daily in transfer service between Pier 22 and Union Freight Station No. 1 (Inland Terminal), and B. & O. freight stations at 26th street and Pier 21, East River.

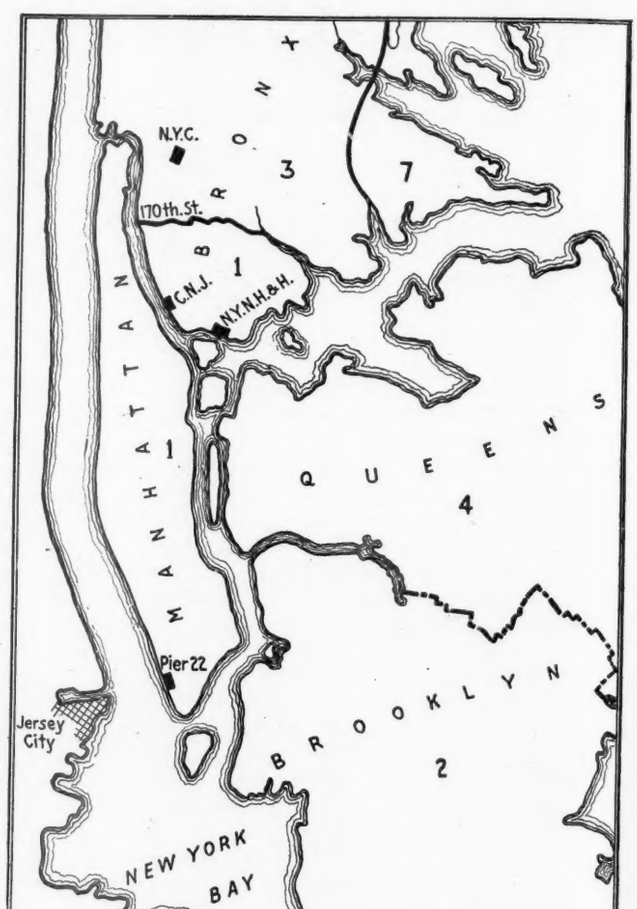
That the new distribution scheme, together with fast merchandise trains, has cut transit time to an extraordinary degree is evident by a random illustration. Before the new plan went into effect, it took a minimum of 9 days for an l. c. l. shipment to travel from Dallas, Tex., to Brooklyn. Dallas to St. Louis, Mo., consumed 2 days; St. Louis to Elizabethport, 3 days; and Elizabethport to consignee 4 to 5 days. Delivery is now made not later than the sixth day, with almost all of the time saved on the terminal haul between Elizabethport and Brooklyn.

The Guide Groups Streets

The guide to the Greater New York Area mentioned above—which is issued to ensure that shipments moving on l. c. l. or any quantity rates actually move on the new routings established unless other routes are specified by the shipper—explains the seven groups in which the city has been divided, setting forth for each the specific waybill instructions required. Following this there appear lists of all streets in the boroughs of Manhattan and Bronx in alphabetical and numerical order, each of which is assigned to one of the seven destination groups.

Supervision of the l. c. l. merchandise service was transferred to the office of manager of station operations by the B. & O. on January 1, 1939, primarily to improve and develop merchandise traffic. Working as a "liaison" arm between the traffic and operating departments—although an integral unit in the latter—the office has an outstanding record of traffic promotion through a method which may be described as "run it—then fill it!" Briefly, in any single project, its first step is to establish a new, or improve a former, merchandise car service. Next job is to suggest and accomplish complementary terminal changes. Final step is to notify the traffic department to sell the new service and build up the business to an extent which will ensure its continued operation. In many cases, a joint sales job is performed, a member of the office actually accompanying a traffic solicitor on his calls.

This illustration will demonstrate. The railroad had lost practically all of the glassware traffic handled out of Mt. Pleasant, Pa. (about 14 mi. north of Connellsville) to New York because branch line service and transfer delays brought transit time on shipments to as high as 6 days. A service was set up whereby a merchandise car left Mt. Pleasant at 1 p. m., reaching Connellsville for freight to be transferred in time to make the fast



How the B. & O. Has Classified Greater New York for L. C. L. Delivery. Group 6—Covering Various Federal and Municipal Islands—Is Not Numbered

merchandise train. Shipments now reach Pier 22 second morning and some of them are in the hands of consignees in New York by 11 a. m.—less than 48 hr. in transit.

In July, 1939, the manager station operations pioneered with the publication of a bulletin to bring news of the latest improvements in B. & O. merchandise service to shippers and agents. Printed by the off-set method, this publication—issued at intervals—often contains as many as eight pages. It now has a mailing list of 9,000 l. c. l. shippers throughout the country (whether B. & O. customers or not) plus 1,500 agents of other lines in large l. c. l. shipping and receiving centers.

ODT Keeps "Train Sheet" On All Vital RR Routes

WASHINGTON, D. C.

THE scope of the Office of Defense Transportation's system of port control and the workings of its traffic channels control were explained in a statement issued on June 21.

The traffic channels plan was set up to make it possible to detect prospective freight bottlenecks and to apply preventive measures before serious trouble develops. Among other things the set-up involves the keeping of a master "train sheet" of the daily movement of all cars, loaded and empty on 121 major railroads. If signs of congestion appear, ODT is prepared to arrange for diversion of trains, or to take other necessary steps to forestall freight traffic jams.

The United States has been divided into three channels of east-west freight haul, and seven channels of north-south flow. The lines drawn on the map divide the country into twenty-one zones. From each channel and zone, embracing all the major railroads, daily reports are received in the ODT. These reports show in detail the number of cars moved into and out of each terminal, the number of cars loaded on any individual line, those received from connecting lines, and those delivered to connecting lines. The figures are broken down into loaded cars and empties. Also shown is the number of cars "on hand" or held over on a division.

These figures pour into the ODT teletype room where cards are punched in code. The cards, fed through the machine, are decoded into a readable report which forms a running day-to-day record. The record is reviewed by regional analysts, "all trained railroad men, each familiar with the region assigned to him." The analysts, by checking receipts against deliveries, detect the overload of any division, terminal or gateway.

The gateways are cross-checked so that ODT may know accurately the condition of the several classification yards. When the reports indicate an overloaded condition, ODT immediately contacts the railroad or railroads concerned, and, through cooperative measures, freight is immediately diverted around the potential danger point.

Every 24 hours the Traffic Channels Section marks a specially prepared map with colored shadings to denote various degrees of congestion at whatever points congestion appeared. This map provides a graphic picture of freight conditions throughout the country. Accompanying the map is a typewritten statement describing the conditions at each trouble spot and analyzing the causes. Information as to potential or actual bottlenecks is supplied to the War Department and other government agencies, and to the Association of American Railroads.

"The possibility of congestion around port areas is the most serious," the statement said, "and these areas are watched carefully. Not only is this office informed daily on the volume of freight movement into port cities, but an accurate check is kept on the contents of the cars. We know how many cars move into piers for unloading, how many carloads are on hand in storage, and whether any trains are being held out of the yards."

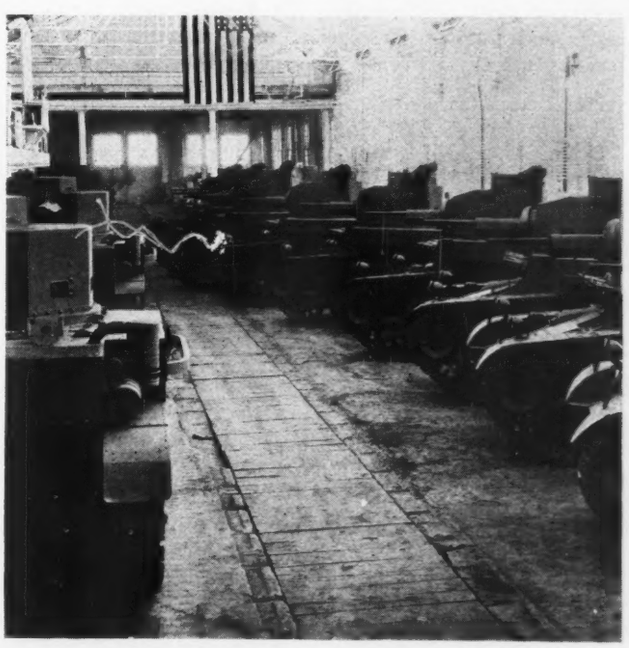
The "first big step in port control," was the system set up recently by ODT in cooperation with the War and Navy Departments, the War Shipping Administration and the British Ministry of War Transport. Under this system permits are issued to shippers before any freight for export can move into a port area. The shipment of cargoes into the port areas is permitted only after definite space bookings on the ships have been obtained.

Freight cars received by railroads in port terminals are reported by railroad initial, car number, contents and disposition, to the regional office of the ODT. There cards are punched in code and the code is transmitted to ODT's Washington headquarters by teletype. These port records are transcribed onto a specially prepared form and are diagnosed daily by the port control unit. Provisions are made at port cities for ground or shed storage of freight if shipping is not immediately available.

Under the port control system, danger of serious congestion is minimized, and in the event a port is suddenly blocked by unforeseen contingencies, it is possible to divert shipments bound by rail for that particular port to some other seaboard terminal. During May and early June, the statement said, only one railway system showed a general tightening up all along its line. In general, freight tonnage during May and early June moved freely through the country's yards and terminals.

Where conditions in any congested area warrant, an ODT field representative is sent into the area with instructions to take whatever steps are necessary to afford immediate relief. Cooperation of the Association of American Railroads and the individual railroads "has facilitated the operation of both traffic channel and port control, and has made mandatory order unnecessary."

* * *



TANKS. 12-Ton Combat Tanks Are Being Turned Out by the Car Builders. Photo Courtesy American Car & Foundry Co.

Offsetting the Loss of a Dominant Traffic Source

WHAT does a railroad, heavily dependent upon one commodity, do when movement of that product ceases? The New York, Ontario & Western—a "hard coal road," having in recent years lost more than two-thirds of its anthracite revenues—has been faced with that riddle and has been persistently seeking an answer. Temporarily, at least, a substantial part of a solution has been found in a more-than-100-per-cent increase in revenue from freight other than coal. Much of this increase in non-coal traffic, of course, is war freight, but much also appears to be independent of the war—although only a cessation of hostilities will disclose the exact proportion. Active nation-wide solicitation of non-coal "bridge" traffic (from Western connections into New York and New England) has been pursued since the early months of the O. & W. trusteeship (1938). Lately, the management has endeavored to develop traffic from Lake Ontario vessels, by the installation of necessary dock facilities at its Oswego, N. Y., terminal.

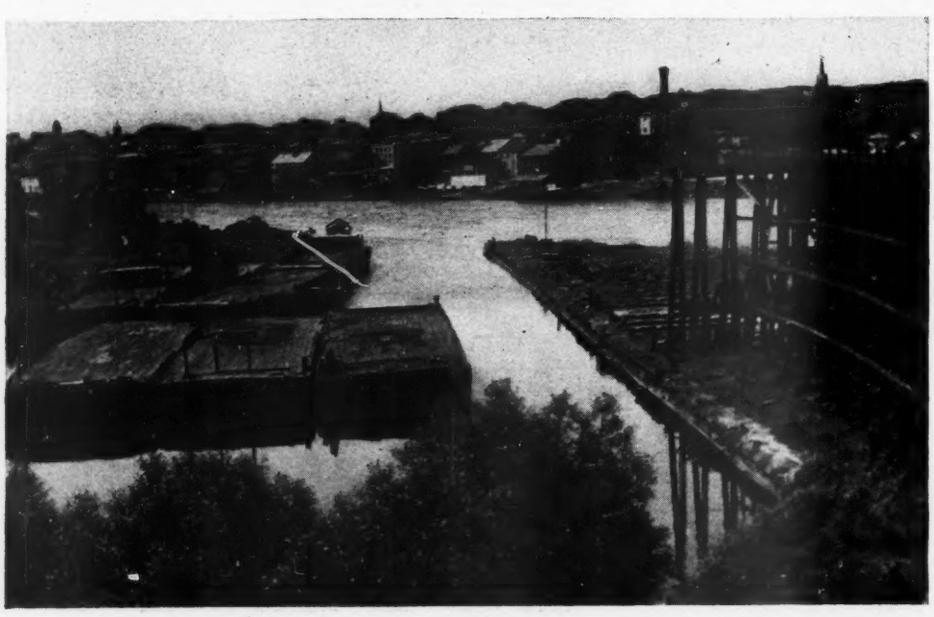
The O. & W.'s line may be likened to an inverted T, with the horizontal bar representing its east-west route, connecting with the Lackawanna and the Lehigh Valley in the Scranton area and extending eastward to New York and to a connection with the New Haven at Maybrook, N. Y. This is the "bridge route." The upright of the T is a line extending northward from this "bridge route" to Oswego on Lake Ontario. Oswego is also a terminal of the New York State Barge Canal system, and the O. & W. has turned its attention to securing traffic from and to lake vessels, which tonnage would otherwise find its way to the state-supported barge route. While unable to offer rates as low as the barge lines, the railroad has sought to overcome this disadvantage by faster and all-year-round service (the barge canal being frozen in winter).

To develop traffic from the lake, a primary requisite was a dock to accommodate vessels. The sorely-pressed carrier could not raise new capital funds, but the trustee had accumulated some $500,000 from the sale of scrap (partially from converting some double track to single track, with appropriate signal modernization)—which, representing capital assets, could not be disbursed as income. Permission of the court was secured to expend $140,000 ($80,000 in 1941 and $60,000 in 1942) for this purpose. A contractor was obtained to do the work who was a good patron of the road's service and who, as a matter of fact, in the course of a year's time paid it more for freight service than the total of the contracts he executed for the railroad. The frugal, yet convenient, dock and warehouse facilities installed at Oswego are portrayed in an accompanying illustration. For contrast, another picture shows the decayed coal facilities which gave way to the improvement. At this dock, either alongside or at the end, sufficient water depth is provided so that the largest vessels plying the lake may tie up for cargo.

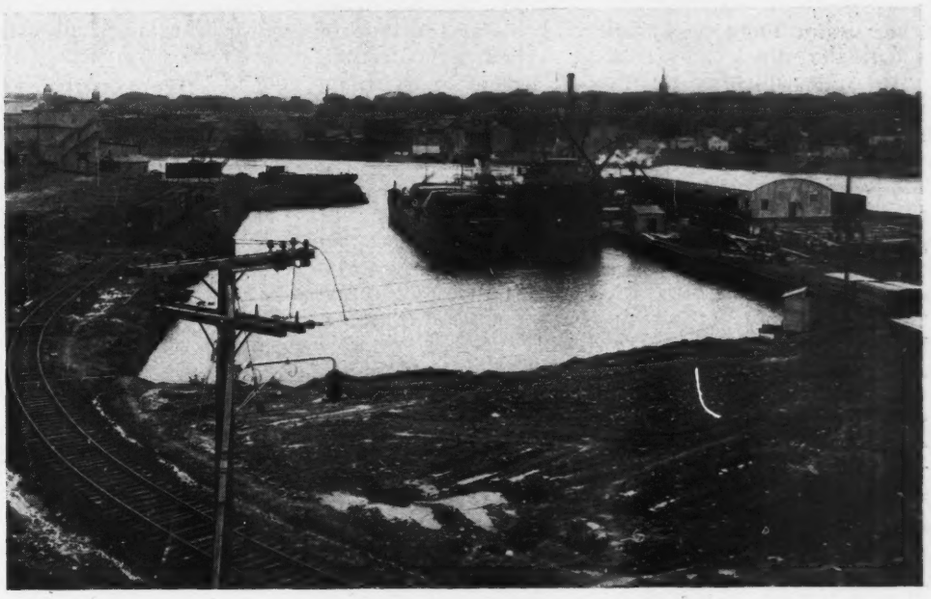
As an initial return on its investment at Oswego, the railroad has already secured a large and regular movement of newsprint paper destined to one of New York's newspapers. Since the carrier had a normal empty movement of closed-car equipment southward from Oswego, the revenue from the newsprint tonnage represents almost clear net gain; and is believed to conform to the national interest in freight car utilization, by reducing the ratio of empty movement. This traffic hitherto had moved from Canada to New York entirely in ocean vessels—and a shift to an interior route was necessary because of coastwise submarine activity and the transfer of ocean shipping to work more vitally requisite to the war effort.

The traffic department of the railroad is persuaded of the possibility of developing considerable east-west peacetime tonnage through this port, by reason of the growing movement via lake-plus-barge-canal (in which traffic the railroad can solicit participation without competing for the higher-rated goods, which will stand the higher charges requisite for an all-rail haul). That is to say, the carrier expects with this facility to attract, not primarily tonnage from other railroads providing all-rail service, but rather for traffic which otherwise would move entirely by publicly-owned and subsidized transportation.

The O. & W. is not yet "out of the woods"—as the accompanying table, showing the first five months' revenues and expenses for each of the past seven years, makes amply clear. Gross revenues for these months in 1936 were $3,680,006—and, in 1942, $2,887,794, or 22 per cent less. On the other hand, non-coal freight revenues were 99 per cent greater and coal revenues were 70 per cent less in the early months of 1942, compared with the same months in 1936. The 1942 five months'



BEFORE: Remnants of an Old Coal Trestle Dominated the O. & W.'s Waterfront at Oswego



AFTER: A Dredging Job, a Little Trackage and a Modest Warehouse Have Begun to Yield Returns in Traffic

operating ratio was almost 86—more than 8 points higher than in 1936 and indicating that the gross revenue currently being earned is still short of that required to provide satisfactory distribution of "overhead" expenses.

A considerable reduction in local tax assessments has been achieved—conforming, at least in part, to the carrier's changed economic status. Current taxes are being paid, but an accumulation of back taxes remains, regarding which negotiations with the taxing authorities are continuing. The road was not a party to the wage increase negotiations last fall—which means that pre-Pearl Harbor wages are still in effect.

When, several years ago, the decision was made to endeavor to recoup losses in coal traffic by increasing the tonnage of other freight, some doubt arose as to the effectiveness of this expedient—because (1) the road, obviously, (especially on the Oswego route, where barge line competition was a large factor) would have to solicit tonnage bearing rather low rates and (2) the road's operating conditions (principally because of grades) are not the easiest. In other words, it was feared that the new traffic to be sought might entail extra expense to offset its contribution to gross revenues. That this suspicion was ill-founded appears to be borne out by average costs per freight-train mile (including labor, fuel, locomotive repairs and train and engine supplies) which in the years 1937-41 have fluctuated as follows: $1.944, $2.062, $1.859, $1.815, $1.800. That is to say, the carrier's freight trains are costing considerably less to operate with freight revenues 72 per cent non-coal than they did when coal tonnage (1937) supplied 59 per cent of freight revenues.

The property gives evidence of satisfactory physical condition. Miles per locomotive failure were 22,500 in 1937 and 48,500 in 1941 (a persistent improvement being shown each year). Maintenance-of-way expenses were $1,623 per mile of road in 1936 and $1,307 in 1937, and were steadily reduced to $1,132 in 1941. Beyond the fact that some new rail will be needed before long, the condition of track appears not to have suffered from the reduced outlay for track maintenance.

Indicative of the enlarged availability of the road's facilities to meet the exigencies of the war effort is the figure on daily miles per serviceable freight locomotive. In 1937 this was 76.7 (the low figure being accounted for by the road's peculiar operating conditions which are not conducive to the attainment of high mileage figures). In 1938, the mileage declined to 74.5 (reflecting the traffic slump in that year). In 1939 it was 81, in 1940 it was 91 and, in 1941, 96. In April and May, 1942, the average was more than 116.

In sum, the O. & W. is "carrying on"—to provide reliable freight transportation service at a time when all facilities which can be made to yield such service are urgently needed in the national interest. The road (or, at least, most of it) would not be here to provide this

Five Months' N. Y. O. & W. Revenues and Expenses, 1936 to 1942

OPERATING REVENUES:	1936	1937	1938	1939	1940	1941	1942
Non-Coal Freight	960,892	1,055,441	825,180	1,036,812	1,124,633	1,356,155	1,912,150
Coal Freight	2,405.859	1,543,589	1,401,733	1,580,516	729,276	673,484	727,622
Total	3,680,006	2,901,046	2,504,751	2,881,316	2,096,476	2,303,735	2,887,794
Railway Operating Expenses	2,855,984	2,432,626	2,478,442	2,455,251	2,159,598	2,181,575	2,481,442
Net Revenue from Ry. Operations	824,022	468,420	26,309	426,065	*-63,122*	122,160	406,352
Operating Ratio	77.61	83.85	98.95	85.21	103.01	94.70	85.93
Railway Tax Accruals	221,101	258,414	265,585	266,627	236,862	218,353	152,062
Railway Operating Income	602,921	210,006	*-239,276*	159,438	*-299,984*	*-96,193*	254,290
Equipment Rents—Net Debit	140,750	148,448	117,599	167,890	123,315	150,188	175,189
Joint Facility Rents—Net Debit	29,198	33,209	28,291	36,770	24,156	20,489	20,579
Net Railway Operating Income	432,973	28,349	*-385,166*	*-45,222*	*-447,455*	*-266,870*	58,522
Other Income	80,479	80,901	10,545	8,631	8,650	9,035	8,331
Miscellaneous Deductions	106,977	106,609	53,036	51,427	41,381	27,862	32,442
Net Income Available for Interest on Bonds & Notes	406,475	2,641	*-427,657*	*-88,018*	*-480,186*	*-285,697*	34,411

May, 1942, figures in totals are estimates.

service if the more pessimistic counsels at the time of its acute difficulties had prevailed. Whether the decision of that time will prove of ultimate benefit to its security-owners is a question to which only the future can give the answer. Employees have well-paying and nationally-useful jobs which they would not have had if less-hopeful advice on the property's chances had prevailed three or four years ago (jobs which, incidentally, these employees might well have destroyed had they insisted on the 1941 wage increase). The taxing authorities, by modifying their exactions, have made possible the preservation (at least for a time) of a source of revenue which undue severity would probably have irretrievably extinguished.

In short, shippers, employees, taxing authorities, the nation—all interests except the security owners—appear to have benefited from the course of action pursued. These latter are not precluded from future benefit if the management's efforts to compete for traffic, otherwise moving all-water, prove successful; and if post-war traffic volume as a whole achieves a large volume (as some hope and believe it may). Just what these post-war prospects may be is a problem presently engaging the attention of the management, which has instituted a comprehensive study to bring to light the ascertainable facts.

Nazis Find Super-Roads Can't Supplant Railways

"ADOLPH HITLER'S widely advertised superhighways loom as an important factor in the undoing of the German war machine, paradoxical though it may seem. The longer the war lasts the more evident it is becoming that Hitler bet on the wrong horse in devoting the nation's energies, as far as the transportation problem is concerned, chiefly to construction of superhighways rather than to improvement, or even upkeep, of Germany's far-flung railway system."

So begins a review of Hitler's transportation difficulties, written by an experienced foreign correspondent recently released from internment in Germany. This article, reprinted herewith from the New York World-Telegram by permission, explains how Hitler's troubles have piled up—fortunately for the Allies—as a result of his failure to renew obsolete railway equipment and of his "intuition" that superhighways are the answer to all land transportation problems.

As long as the "blitz" idea worked, the writer continues, "Hitler was right in honeycombing the country with splendid highways. But when the war became one of years instead of months the reverse side of this picture was turned up: fuel grew scarcer and scarcer, the air force claimed the best gasoline, lubricants became a major problem, wear and tear of cars proved far greater than new production or the seizure of cars in conquered countries.

"It suddenly become evident that the much-maligned steam railway was a far more economical mode of transportation for long hauls than were motor trucks. The farther the German army moved from its home base the more essential the railway became.

"Hitler during his six-and-a-half-year regime before the outbreak of the war had neglected the railways. After one year of the Hitler regime the income of the federal railways (all railways in Germany are government-owned) became hardly sufficient to cover operating expenses. Reserves were drawn on constantly. Passenger coaches were allowed to deteriorate. New freight cars were constructed in insufficient numbers. According to 'Der Volkswirt' a majority of Germany's 600,000 freight cars were obsolete by 1938.

"Even during the first winter of the war—that of 1939-40—the transportation system proved inadequate. Adverse weather conditions made the breakdown more evident than otherwise. Fuel and foodstuffs did not move as fast as they should, with the result that Berlin, for instance, suffered a winter of privations.

"The winter of 1940-41 proved somewhat better, since weather conditions were more favorable. But the constant movement of troops into the Balkans early in 1941 again meant a shortage of railway equipment at home and led to a constant reduction in the number of passenger trains running, and often made for huge accumulations of freight in larger centers.

"The winter of 1941-42 was the worst ever. The inadequacy of the railway system now became so obvious as to cause alarm in official circles. The Russian campaign ate heavily into Germany's railway rolling stock. Of this there can be no doubt. The Russian scorched-earth policy prevented Hitler from seizing much rolling stock as war booty. More than 1,000 miles of track had to be relaid to match the narrower German gage. To keep army supplies moving on these thousand miles became a problem of the first order.

"Mail for the soldiers in the east often couldn't be delivered for weeks and months. This proved a heavy strain on morale both at the front and at home. So Hitler was simply compelled to reassure his people about transportation. As early as January, 1942, Nazi editors were admonished to write reassuring articles on the transportation system. The publication during the first days of the year of the annual railways report was made the occasion for a burst of literary activity, the burden of which was that, to quote the Frankfurter Zeitung, 'the Reichsbahn (federal railway) has proved its efficiency and is prepared for all eventualities.'

"In that assurance lay the confession that Hitler, who according to his closest followers never miscalculates, had slipped in the matter of transportation."

Confirmation of this report appears in the analytical study of the German railways in peace and war prepared by C. E. Whitworth of the (British) Railway Research Service and published in the April, 1942, issue of the Journal of the Institute of Transport (London). As early as 1937, according to this authority, the average age of the freight cars then in service in Germany was over 22 years, while replacements during the preceding five years never exceeded 5,000 cars per year. In 1939 a four-year plan for building new railway equipment was undertaken, calling for the construction of 28,000 freight cars each year, and it is probable that more than this number have been built, as military operations and traffic dislocations have created an enormous demand for cars, but it is the conclusion of this writer that a shortage of railway equipment has definitely limited the success of the German army.

Development of the Russian campaign has multiplied military requirements for freight cars, and drastic steps have been taken to make up the deficiency, including immediate compulsory loading and unloading, rigid restrictions on the acceptance of certain classes of freight, use of forwarding permits, postponed maintenance, diversion of merchandise traffic to waterways, and required overloading of cars, but these measures, as well as the severe curtailment of passenger service, the article concludes, only emphasize the probability that the limit of capacity has been reached.

Railroads-in-War News

Carriers Set New Tank Car Record

731,520 barrels of oil daily are moved into the east coast area in a week

A new record-breaking movement of 731,520 barrels of oil each day by rail to the east coast for the week ended June 13, was announced this week by Petroleum Coordinator Harold L. Ickes.

This movement tops by 24,720 barrels the old mark of 706,800 barrels daily, established in the week of May 23. It represents also an increase of 64,710 barrels a day—or 9.7 per cent—over the volume moved during the week ended June 6, when car loadings averaged 666,810 barrels daily.

In handling the movement the 29 oil companies participating loaded 24,384 cars. Including cars that were on the way back west for reloading, it is estimated that the east coast service employed 56,000 cars, taken largely from other sections of the country.

As noted briefly in last week's issue, the House, on June 17, passed and sent to the Senate a bill authorizing the construction of a barge canal across northern Florida and at least two pipelines designed to transport oil from the western coast of Florida to the eastern coast and from oil fields in Mississippi to either Savannah, Ga., or Charleston, S. C.

During debate on the barge canal feature of the bill, Representative Green, Democrat of Florida, declared that "the only ones that are opposing it are the railroads."

Later in the debate the charge was made that the railroads had raised the fear among southern Floridians that the construction of a cross-state barge canal would endanger the water supply of that section of the state. Representative Cannon, Democrat of Florida, who was opposing the construction of the canal, told his colleagues that "the water question was raised originally and has been fought constantly and with great religion by the citrus growers and the farmers of south Florida. They are the ones who raised the question."

Hearings June 30 on Reed Bill to Boost Demurrage Charge

Hearings will begin June 30 before a Senate interstate commerce committee subcommittee on Senate Joint Resolution 147, the measure sponsored by Senator Reed, Republican of Kansas, to drastically increase demurrage charges for the purpose of expediting the release of freight cars. As noted in the *Railway Age* of May 16, page 963, the resolution proposes demurrage charges running up to $25 a day, and a reduction in the free time now allowed for loading and unloading cars.

The sub-committee which will conduct the hearings consists of Senators Johnson of Colorado and Tunnell of Delaware, Democrats, and Senator Reed.

Eastman Urges That Public Themselves Ration Travel

"If the American people will voluntarily impose certain restrictions upon their travel, there is good reason to hope that no drastic control over travel will be necessary," said Director Eastman of the Office of Defense Transportation in a June 19 statement calling for deferment for the duration of all meetings, conventions, and group tours which are not closely related to furtherance of the war effort. Mr. Eastman asked also that all state and county fairs be postponed, and suggested that attendance at meetings which are closely related to the war effort should be skeletonized.

Vacations were O. K.'d by the ODT director as "desirable from the standpoint of public health, efficiency, and morale"; but he said again that vacation travel should be staggered throughout the year, and should be scheduled so that trips would neither start nor terminate on week-ends. Aside from vacations, he added, people should not travel "for mere pleasure or when travel can be avoided."

Mr. Eastman's statement came in response to inquiries which ODT continues to receive regarding the possibility of limitations on travel "during the months immediately ahead."

ODT Order No. 11 Permits Bus Services to Beaches

Clarifying the application of the Office of Defense Transportation's General Order No. 11 which places restrictions on intercity bus services to places "conducted primarily for purposes of amusement or entertainment," Director Eastman of ODT said in a June 22 statement that the order does not require the discontinuance of services to beaches, public parks, "or other similar places conducted primarily for purposes of relaxation, rest, and health-building." The latter, he said, should continue to be served "to the extent of available facilities"; but if rail service is available "it should be used to the limit of its capacity, and seasonal bus service should be held to a minimum."

ICC-OPA Contract Carrier Rates Set

"Working arrangement" made to avoid conflict between these two agencies

The Office of Price Administration and the Interstate Commerce Commission have agreed upon a "working arrangement" whereby there will be avoided any conflict between I. C. C. regulation of contract carrier minimum rates and OPA control over the maximum rates of such carriers. Rates of railroads and other common carriers are exempt from OPA's general maximum price regulation, but the regulation applies to contract carriers and to various services performed in connection with transportation.

The I. C. C.-OPA understanding was confirmed in recent correspondence between OPA Administrator Henderson and Acting Chairman Aitchison of the I. C. C. It contemplates that OPA's maximum rate for a particular interstate contract carrier shall be no less than the minimum rate approved by the I. C. C. whenever the commission finds that such minimum "is necessary to maintain an essential transportation service." Mr. Henderson said that he would establish this procedure in a supplementary regulation to the maximum general price regulation.

Acting Chairman Aitchison was authorized by the commission to inform Mr. Henderson that the proposed arrangement would be acceptable, the commission assuming that the supplemental regulation "shall govern in all instances in which we have prescribed, or may hereafter prescribe, minimum rates and charges for contract carriers."

As noted in the *Railway Age* of June 20, page 1213, the effective date of OPA's general maximum price regulation as it applies to charges for transportation and services performed in connection with transportation has been postponed until July 1.

In that connection, OPA on June 24 issued an amendment to its general maximum price regulation, listing specifically the services to which the regulation shall not apply. The exempt list includes rates charged for "transportation of commodities by persons offering their services to the general public as common carriers by rail, water, motor, pipe line, or other means of conveyances; provided, however, that charges for storage and warehousing and all other services incident thereto by any person shall not be excluded." Also exempt are rates charged for the transportation of persons; and rates charged by "express companies and freight forwarders

offering their services to the general public as common carriers."

War Department Postpones New Air Travel Priorities System

The War Department has announced that the present system of issuing priorities on the commercial air lines will be continued until July 15. As noted in the *Railway Age* of June 13, page 1161, a new priorities system had been scheduled to go into effect on June 20.

ODT Appointment

Horace M. Wigney of Chicago has been appointed chief of the Refrigerator Car Section, Division of Railway Transport, Office of Defense Transportation, with headquarters at Washington, D. C. Mr. Wigney comes to ODT from the Union Asbestos & Rubber Co., where he has been assistant vice-president in charge of research and development of refrigerator car specialties.

Senate Passes Telegraph Merger Bill

The Senate has passed and sent to the House S. 2598, a bill which authorizes the consolidation of the Western Union and Postal Telegraph Companies. The legislation, which is the result of lengthy hearings by the Senate interstate commerce committee, would permit the Federal Communications Commission to approve domestic mergers upon application.

I. C. C. Authorizes New Type Tank Cars

Granting an application of the War Production Board, the Interstate Commerce Commission has amended its regulations for the transportation of explosives and other dangerous articles to authorize shipments of gasoline in additional types of steel tank cars. The cars would be government-owned; and they are to be constructed "of lighter-gage steel than current standard, with strip-mill sheets instead of heavier cross-rolled plates."

Express Agency Mustn't Handle L. c. l. Under Express Certificates

Railway Express Agency motor carrier certificates which embody the usual conditions designed to insure that the trucking operations shall remain auxiliary to or supplemental of express service do not authorize the transportation of l. c. l. freight, according to Acting Interstate Commerce Commission Chairman Aitchison's reply to an R. E. A. inquiry in that connection.

The inquiry was made in a recent letter sent to Mr. Aitchison by H. S. Marx, vice-president and general counsel of R. E. A. Mr. Marx told of requests R. E. A. was receiving from railroads to handle traffic in situations where compliance with the Office of Defense Transportation's minimum-load orders required the discontinuance of l. c. l. cars. The Marx letter was sent by Mr. Aitchison to American Trucking Associations, Inc., for comment; and A. T. A. opposed any ruling which would hold that the express certificates authorized the proposed l. c. l. operations.

The Aitchison reply said that in the opinion of the I. C. C., "only shipments moving as express may lawfully be transported under authority of such certificates." It added: "Railway Express Agency may, in the event it believes that such operations meet the requirements of section 210(a), file applications for temporary authority to transport l. c. l. freight by motor vehicle between places between which it now transports express matter under authority of such certificates. Each such application will, of course, be determined upon its merits. All applications for temporary authority are, as you are no doubt aware, accorded prompt action by the commission."

Thinks Carriers Should Have Additional Equipment

Declaring that performance of the railroads "has been so good that I think the War Production people are denying them facilities for the manufacture of an increased number of locomotives and cars that they will need in 1943," Brig. Gen. C. P. Gross, Chief of Transportation, Services of Supply, recently told a House appropriations subcommittee on the War Department appropriation bill for 1943 that the carriers "cannot go on forever without any additions or replacements."

"Mr. Eastman has made a very fine case for the railroads," continued General Gross, "but he has been denied. I think there should be some support to Mr. Eastman's contention that they need some additional facilities for the work they will have to do."

Four New Appointments to ODT Rail Transport Staff

C. T. Kenney and William E. Curley have been appointed to the staff of the Division of Railway Transport, Office of Defense Transportation, as supervisors of rail terminals, respectively, at Seattle, Wa and Chicago. Mr. Kenney has been assistant superintendent for the Chicago, Rock Island & Pacific at Cedar Rapids, Iowa, while Mr. Curley has been Chicago terminal trainmaster for the Illinois Central.

Two other appointments to the Divisions staff are those of Shannon Kuhn to the position of locomotive assistant, specializing in locomotive repair problems, in the Mechanical Section; and of Frank J. Swanson as service representative in that Section. Mr. Swanson, who has been supervisor in the Chicago, Milwaukee, St. Paul & Pacific's car department at Chicago, will visit car builders and railway shops to aid in facilitating car building and repairing. Mr. Kuhn comes to ODT from the position of general foreman in the New York Central's Cleveland, Ohio, shops.

War Department Considering Railroad to Alaska

The release of testimony before a House appropriations subcommittee on the War Department appropriation bill for 1943 reveals that that agency is considering the construction of a railroad into Alaska to supply military forces in that region.

"We have four methods—we hope to have four methods—of getting into Alaska," Lt. General Brehon B. Somervell, Commanding General, Services of Supply, told the subcommittee. "One will be by sea, one will be by air, one will be by road, and one may be by railroad."

Representative Case, Republican of South Dakota, wanted to know what the relationship of the railroad route was to the highway route, geographically.

"The trucks, of course, require a tremendous amount of gasoline," replied General Somervell. "In other words, their pay load over such a long distance is relatively small. We feel that if the effort up there is to be of any size, it will have to be supplied by a railroad; and what we are asking now is money to make a survey of the railroad so that we can have some better estimates and be better prepared to carry out the job if that is going to be needed."

Meanwhile, Anthony J. Dimond, Delegate from Alaska, has introduced in the House H. R. 7284, a bill which would authorize the appropriation of $25,000,000 for the construction of a highway between Prince George, British Columbia, and Whitehorse, Yukon Territory, Canada.

A-1-j Priorities for Repair and Maintenance Materials

The War Production Board last week amended Preference Rating Order No. P-88 to raise from A-3 to A-1-j the preference rating available to railroads for deliveries of materials essential for repair and maintenance of track, structures, signal and communications systems, cars and locomotives and other facilities. The amendment specifies that the ratings under the order may be applied without further authority for installations in which the charge to capital account is not in excess of $500 for a single project.

Another provision of the amendment prohibits the application of a higher rating than A-1-j by suppliers to replenish inventories depleted as a result of deliveries made on A-1-a orders for emergency repairs. Among other modifications of the original order is one under which railroads may not only sell material to their own subsidiaries but also to lines "not owned but customarily maintained by them or their subsidiaries."

Seek Emergency Board in Short Line Wage Dispute

Representatives of railroad labor organizations have asked Dr. William M. Leiserson, chairman of the National Railway Labor Panel, to appoint an emergency board to investigate a dispute arising from the failure of some 40 railroads, mostly short lines, to make wage increases and vacations-with-pay agreements in line with the settlement reached last December in the general wage case. Dr. Leiserson stated on June 23 that he was checking on the matter to see whether procedures under the Railway Labor Act had been exhausted.

Under the executive order creating the National Railway Labor Panel, Chairman Leiserson may upon petition by interested labor organizations appoint an emergency board from the panel if a dispute is such "that if unadjusted, even in the absence of a strike vote, it may interfere with the

prosecution of the war." The panel was created by President Roosevelt, following a request of the labor organizations for wartime procedures whereby disputes could be submitted to emergency boards without the necessity for taking a strike vote. Members of the panel from which Dr. Leiserson must choose emergency-board members were listed in the *Railway Age* of June 13, page 1160.

Says Non-Use of Land-Grant Rates Cost Government $7,500,000

Failure for a while to use land-grant rates on materials going into government projects built on the cost-plus-a-fixed-fee basis "caused a loss to the government of $7,500,000," according to a House Military Affairs Committee report on the war production program which was made public this week. The situation, the report said, came to the attention of the committee in the course of its investigation of awards of contracts for asphalt for use at Elgin Field, Valparaiso, Fla.

The question of who was the low bidder hinged upon the applicability of land-grant rates to the delivery of the asphalt by rail. The Secretary of War ruled that such rates were applicable in the case; but the committee said that up to the time of its inquiry land-grant rates had not been used on the cost-plus-a-fixed-fee contracts.

Land-grant rates also came in for brief discussion in recent testimony given before a House appropriations sub-committee by Lieutenant General Somervell, commanding general, Services of Supply. Representative Engel, Republican of Michigan, asked the general to state the position of the Army on the proposed cancellation of land-grant rates. General Somervell replied: "We do not want them canceled, but we do not want to be bound by the necessity of following land-grant routes if it is necessary to get articles to destination sooner than the land-grant route would permit or, too, if the congestion on the railroads gets to such a point that in order to relieve congestion on a particular line it would become necessary to move traffic over another." The general, in response to further questioning, said that he did not think the land-grant-rate law had in any way handicapped him in connection with his transportation problems.

Materials and Prices

Following are references to orders of interest to railroads issued by the War Production Board and the Office of Price Administration since June 13.

Alloy scrap—Order M-24-c, issued June 18, sets up classifications of alloy steel scrap, provides for segregation by classifications and prohibits mingling of the segregated alloy scrap except in the melting process. Important savings in the principal alloying elements, nickel, chromium, tungsten and molybdenum, are expected as a result of the order. Alloy scrap now is segregated by steel mills as it is produced, but only a limited number of fabricators of steel have practiced segregation.

Copper—An interpretation of Copper Conservation Order M-9-c, issued June 15, prohibits the use of copper and copper alloys in the manufacture of pipes and fittings for use in water supply and distribution systems, except corporation cocks and curb stops. M-9-c provides that copper cannot be used where any less scarce material is an acceptable substitute. Iron and steel may be used satisfactorily for pipes and fittings; hence copper and copper alloys cannot be used for these purposes. The interpretation does not apply to plumbing fixtures in buildings, in which the use of copper is specifically prohibited by Order M-9-c, nor does it apply to water meters.

Insulation—An amendment to Conservation Order M-79, issued June 19, provides that 85 per cent magnesia pipe coverings containing any type of asbestos may not be used except by specific authorization of the Director of Industry Operations; in installations where temperatures of 212 degrees or higher occur; in ships; or in underground installations. The amendment further restricts the use of certain grades of imported long-fibre amosite asbestos to ships and certain military purposes.

Off-rail machines—Amendment No. 1 to Limitation Order L-53, issued June 15, prohibits any person from selling, leasing, delivering or transferring any new track-laying tractor or new auxiliary equipment, regardless of any preference rating, except upon a specific release issued prior to June 15, or upon specific authorization. The amendment does not prevent a dealer or any other person from delivering or accepting delivery of auxiliary equipment to be mounted on a specific track-laying tractor in the possession of an ultimate consumer. The amendment gives WPB's Construction Machinery Branch greater control over the distribution of heavy type tractors by prohibiting producers from shipping to dealers and by requiring a release in connection with all rated orders, regardless of their date of issuance. Heretofore, no restrictions were placed on orders bearing an A-2 or higher rating issued prior to February.

Plywood—Limitation Order L-150 prohibits the production or delivery, after July 1, of types and sizes of Douglas fir plywoods other than those listed in the order, except upon specific authorization. The simplification practices ordered will result in a reduction of sizes from about 4300 to approximately 300. Delivery is permitted for work which will be completed by July 1, or work so processed that conformity with the specifications would be impracticable.

Railroad inventories—Railroad supplies have been removed from the controls imposed by the Suppliers' Inventory Limitation Order L-63 for inventory calculations. The change was effected by Amendment No. 4 to L-63, issued June 15, because railroad supplies are such slow-moving items that no vendor can turn over his stock within the period required by the order.

Railroad materials—Amendent No. 1 to P-88, issued June 18, raises to A-1-j the rating available to the railroads for deliveries of materials essential for repair and maintenance of track, structures, signal and communications systems, cars and locomotives, and other important operating equipment. Previously, an A-3 rating was available for deliveries of these materials. The amendment also specifies that ratings under the order may be applied without further authority for installations in which the charge to capital account is not in excess of $500 for a single project. The amendment prohibits the application of a higher rating than A-1-j by suppliers to replenish inventories depleted as a result of deliveries made on A-1-a orders for emergency repairs. Other minor changes are made in the original order, including a provision that railroads may not only sell material to their own subsidiaries but also to lines not owned but customarily maintained by them or their subsidiaries.

Water meters—Schedule I to Limitation Order L-154, issued June 18, declares that no stainless steel or nickel alloys may henceforth be used in water meters. Tin is prohibited except as an alloy in copper, and copper and copper base alloys are eliminated from all parts of the meter except internal gears and workings. Schedules similar to the one on water meters are expected to be issued to cover auxiliary equipment.

Paint pigments—The maximum price for leaded zinc oxides containing 35 per cent or more lead, which was reduced ¼ cent a lb. by the general maximum price regulation, has been allowed to return to the April 1, 1942 level of 7 cents a lb., effective June 22. Producers had been working under a voluntary agreement, effective January 1, 1942, providing for a maximum price of 6.75 cents a lb. for leaded zinc oxides containing 35 per cent or more lead delivered in bags in carload lots. After January 1, ceiling prices for lead and lead sulfate were raised with OPA approval. This increased producers' costs of leaded zinc oxides, which are used mainly in paints. Investigation disclosed that an advance in the price of such oxides was reasonable. An advance of ¼ cent a lb. in 35 per cent or higher leaded zinc oxides to a price not in excess of 7 cents was granted March 28, 1942, effective April 1, in order to enable producers to make their quarterly contracts.

Steel plate—The Granite City Steel Company was granted authority to increase the base price of all carbon steel plates, base grade, to $47 a net ton, f.o.b. Granite City, Illinois, by Order No. 12 under Revised Price Schedule No. 6 on iron and steel products, effective June 6. The company, which has increased its plate production from approximately 25 per cent of total output to well in excess of 50 per cent, had requested that it be allowed to charge a base price of $50 a ton, f.o.b. Granite City, for all carbon steel plates. This request was based on the assertion that current high output of plates, with subequent decline in production of more profitable products, would result in a loss of $30,000 a month if plates were sold at ceiling prices. The ceiling price on plates is $42 a net ton, base grade, at established basing points. On June 5, 1941, the company was granted permission to charge $45 a net ton, f.o.b. mill, for ship plates.

Steel scrap—Changes in specifications for certain grades of iron and steel scrap, and additions to grades already in Revised Price Schedule No. 4, were made by Amendment No. 6, effective June 17. Four new listed grades of steel scrap are added to the schedule—No. 3 bundles, cast steel, tube scrap and automotive springs and crankshafts. Premiums are established for certain contained alloy. The method of setting forth basing point prices is simplified by stating the prices of particular grades in terms of differentials over and under the price of the base grade, No. 1 heavy melting steel. Specific switching charge deductions to be subtracted from basing point prices in computing shipping point prices within basing points are established. A specific shipping point price of $15.33 a gross ton is defined for the base grade, No. 1 heavy melting steel, at all shipping points in New York City, and a 50-cent a gross ton loading charge is authorized where shipment is by deck scow or railroad lighter. Louisiana is made a remote State, thereby enabling more distant consumers to obtain scrap from Louisiana by absorbing a higher freight charge. Limitations on freight absorptions are relaxed to facilitate the movement of scrap from northern New England to New England consumers. A preparation in transit privilege is established for unprepared railroad scrap.

Tool steel—A maximum price for a type of chrome-vanadium-steel scrap sold by the Tennessee Coal, Iron and Railroad Company, Birmingham, Alabama, a high speed tool steel scrap similar to the molybdenum type but differing in alloy content, was established by Order No. 8 under the general maximum price regulation, effective June 9. After computing the value of the principal alloying materials, with the exception of steel, maximum prices of $51.82 a long ton, f.o.b. mill, for the solid grade and $44.04 for the turnings and borings grade were established. The scrap contains 8 to 10 per cent chrome, 1.20 to 1.30 per cent molybdenum, 0.65 to 0.75 per cent vanadium, small percentages of carbon, manganese, sulphur, phosphorus and silicon and the remainder steel.

Transportation charges—The effective date of the General Maximum Price Regulation as it applies to transportation, storage and related services has been postponed to July 1. The postponement applies to charges for transportation services of carriers other than common carriers; commercial storage and warehousing; stevedoring companies; car loading and car unloading companies; freight forwarders; consolidators or distributors not offering such services to the general public as common carriers; terminal services; services of transportation brokers, customs brokers and transportation agents (other than employees of transportation companies); and precooling, icing, ventilating and heating of shipments and transporting equipment. The extension was made because of the vital need of avoiding any possible interruption in the flow of commodities.

GENERAL NEWS

U. S. Barge Line Is in Red Again

Net earnings of rail terminal are more than offset by barge line losses

Although the government-owned Inland Waterways Corporation reported a deficit of $190,561.77 for 1941, the breakdown of that figure shows that the rail-line operations of the Warrior River Terminal Company, I. W. C. subsidiary, turned in a net income of $101,929.60. The annual report, submitted to Secretary of Commerce Jones, was made public last week.

It shows that the rail-line services of the Terminal Company were the only profitable 1941 operations. Meanwhile, the water operations on the Warrior river resulted in a deficit of $264,500.58, which more than offset the rail-line net to produce a 1941 net deficit of $162,570.98 for the Warrior river system as a whole. Operations of the Mississippi system resulted in a deficit of $27,990.79.

The consolidated deficit for 1940 was $273,725.40. The report shows that water-line tonnage delivered in 1941 exceeded the 1940 total by 12.24 per cent, but "due to the character of the freight handled, gross revenues increased only 10.18 per cent." The 1941 gross freight revenue was $7,691,515.49 as compared with 1940's $6,925,402.64. Operating expenses in 1941 were up only nine per cent above 1940, the increase in transportation expenses at a greater rate than the percentage increase in revenue being offset by the actual reduction in traffic expenses and the lower percentage increase in maintenance and general expenses.

The report made by the Corporation's secretary-treasurer to President Chester C. Thompson and included by the latter in his report to Secretary Jones has the usual paragraph about "saving" to the public on traffic handled by I. W. C. Such "savings" are put at $2,312,400 for 1941, as compared with $2,057,000 for 1940. These "savings" represent "the difference between charges paid on traffic routed via Inland Waterways Corporation and what the charges would have been if the traffic had moved all rail." On that basis it is calculated that the "savings" on traffic handled by I. W. C. from June 1, 1924, to December 31, 1941, amounted to $37,324,400.

The report notes that weather conditions in 1941 were generally favorable, but the trend of unbalanced traffic, which is "as great a determinant of profitable operation as any other," was accentuated last year. Whereas in 1940 freight moved 43 per cent southbound and 57 per cent northbound, these percentages in 1941 were 31 per cent southbound and 69 per cent northbound. These are averages for the whole system, and the degree of unbalance for individual rivers "is even more striking."

Substantial additions to the Corporation's floating equipment were made during 1941. Fifteen new steel carbo barges were placed in service, as were six fuel oil barges to be used only to carry fuel for the Corporation's towboats. The cargo barges cost $945,975, and the oil barges $242,695. Plans for the construction of a towboat of new design were deferred "in the interest of conservation of shipbuilding resources."

I. W. C., President Thompson said in closing, is "fully cooperating" with the Office of Defense Transportation, and with other agencies of the government concerned with the successful prosecution of the war. Moreover, it will "continue its efforts to provide better and more efficient service to shippers generally, so that the benefits of water transportation . . . may become increasingly available to the economical development of the midcontinent section of the United States, as well as to the successful prosecution of the war." Also, the I. W. C. president was pleased to report that the Corporation during 1941 reached "a much better understanding" with competing privately-owned water carriers; and this new policy of cooperation will continue, "so that all interested in the complete development of commerce on the inland waterways of the nation can exchange constructive views and adopt methods that will redound to the benefit of all" Previously, Mr. Thompson had said that many privately-owned water carriers had embarked on the inland waterways as a result of the "pioneering and experimenting which this Corporation was created to do, and which it still carries on."

I. C. C. Bureau of Statistics Gets New Name

The Interstate Commerce Commission announced on June 24 that it had changed the name of its Bureau of Statistics to "Bureau of Transport Economics and Statistics," effective July 1, 1942.

N. I. T. League Wants Rate and Classification Probes Suspended

The National Industrial Traffic League has asked the Interstate Commerce Commission to postpone the hearing scheduled for September 22 at Indianapolis, Ind., in the Nos. 28300 and 28310 investigations of the class rate structure and Consolidated Freight Classification, and to suspend for the duration of the war further proceedings in those cases. The League thus supports the previously-filed petitions of the railroads and of American Trucking Associations, Inc.

Pullman Trial Nearing Close

Gavin and Ashby testify there is economy in having one company run sleepers

Testimony in the Pullman anti-trust suit, resumed in Philadelphia on June 1 and reported regularly in these pages since that date, is expected to be completed early next week. Among witnesses presented by the defense during the fourth week of the current session were Frank J. Gavin, president of the Great Northern, and George F. Ashby, vice-president of the Union Pacific.

Mr. Gavin explained that the Great Northern has not put a high speed lightweight streamlined train in service between St. Paul and the Pacific coast because it would be too expensive. Since there are no large communities on the route between the Twin Cities and Spokane, intermediate passenger business is light, and the most important service the railroad can provide in this predominantly agricultural territory is economical freight transportation. To get the full benefit of high speed passenger equipment a heavy expenditure for track adjustment would be required, and maintenance costs would be increased, with the result that freight operations would have heavier charges to bear. There has been no difficulty about getting lightweight passenger cars, the witness added; on the contrary, Pullman had tried to persuade the Great Northern to install some. The railroad gave up operation of its own sleepers, he said, because Pullman service was superior and less expensive.

Under cross-examination Mr. Gavin outlined the experience of his road with sleeper-coach cars, which were tried on some lines of light traffic density as a matter of business policy and community service. After trial the cars were withdrawn, he asserted, because they were too unprofitable, not because of any pressure from Pullman or any difficulties over their operation.

Mr. Ashby's testimony emphasized the readiness of the Union Pacific and the roads associated with it in through line services to operate railroad-owned sleepers if at any time satisfactory terms could not be obtained from Pullman. While the railroad prefers not to go into the sleeping car business because it has found "side lines" generally unprofitable, it has the facilities for such operations and its Pullman contracts give it the opportunity to buy the cars. In fact, he declared, Pullman needs the Union Pacific just as much as the Union Pacific needs Pullman.

The railroad expected some sleeping car lines to show a loss, he continued, because good business policy required their operation for the convenience of shippers or as a service to localities dependent on the road for good service, and there was no controversy between the railroad and Pullman over such operations.

Cross-examination of Mr. Ashby led to his discussion of contract negotiations between Pullman and the railroads making up the "Overland Route." The railroads were not willing, he said, to underwrite excess costs of lightweight sleepers, because such terms might give Pullman an opportunity to indulge in some extravagant ideas, and much trading of views and proposals preceded an agreement on a mutually satisfactory basis. In 1936, when their contracts with Pullman expired, the Southern Pacific and Union Pacific had considered the possibility of joint operation of sleepers, and had even given some thought to bringing the Santa Fe into the situation, but dropped the idea after they reached an agreement with Pullman. In his experience the Union Pacific has never had a disagreement with Pullman as to what cars it should furnish, and he thought the fact that the Southern Pacific and North Western would lend their support if such a condition developed was adequate assurance against it.

C. B. Heinemann, a research specialist, identified and explained some 200 exhibits presented by the defense to round out the historical background of the Pullman organization and of other sleeping car operations that Pullman took over.

On June 18 cross-examination of David A. Crawford, president of Pullman, Inc., was resumed. Following some questions about the rate differential between Pullman sleepers and railroad-owned coaches, Department of Justice attorneys went at some length into the accounting practices followed by Pullman in setting up depreciation reserves, in an effort to show that an excess reserve of some 40 million dollars had been accumulated at the expense of the railroads over a period of about 20 years. Mr. Crawford defended his company's methods, pointing out that the total cost to the railroads was the same, though intermediate collections might be larger. Instead of being reprehensible, this practice has resulted in a strong cash position, which is most fortunate, he asserted, because as more and more standard heavy cars are devoted to troop movements their rapid deterioration is expected, so a large demand for modern lightweight sleepers will follow the end of the war, and in this reserve the capital to build them will be available.

Homer B. Vanderblue, dean of the School of Commerce of Northwestern University, was introduced as a transportation expert who presented a detailed report of his study of the seasonal fluctuations in demand for sleeping car space on various railroads and of the historical and economic factors which, in his opinion, justify the unified service of the Pullman pool. Under cross-examination he explained the advantages of pool service to roads like the Boston & Maine or Florida East Coast, where seasonal variations in business are large, and contrasted such operations with those of lines like the Southern and the Pennsylvania where space requirements are more even.

On June 24 the court heard an explanation of the actual day-by-day operation of the sleeper pool and the regular assigned car list as applied to definite situations. As much of the testimony of Mr. Crawford and other witnesses had referred to the development of the construction standards established by the A. A. R. and generally accepted now by car builders, E. E. Adams, vice-president of Pullman, Inc, was recalled to explain to the court how tests were conducted at Altoona on lightweight cars of various types of construction to determine the nature of these structural specifications. After these witnesses were heard the court adjourned until June 30, when it is expected that both sides will complete their presentation of testimony. Final arguments of counsel will be heard later.

Passenger Officers Postpone Meeting for Duration

The American Association of Passenger Traffic Officers has postponed its annual meeting, heretofore held in November, for the duration because of present general conditions. Decision to omit the convention was made at a meeting of the executive committee at Chicago on June 19.

I. C. C. Service Order No. 78-A

The Interstate Commerce Commission on June 20 issued Service Order No. 78-A, vacating as of that date Service Order No. 78 which was issued on June 15 to direct the Canadian National and Grand Trunk to disregard routings and forward traffic between Montreal and Portland, Me., by the most available open routes. The washout of a bridge near Lennoxville, P. Q., Canada, was the reason for the order.

Service Order on Livestock Cars Applied to Intrastate Traffic

The Interstate Commerce Commission has amended Service Order No. 71 so that effective July 1 it will apply to intrastate commerce as well as interstate and foreign commerce carried by railroads. As noted in the *Railway Age* of March 14, page 564, the order suspended what the commission regarded as equipment-wasting provisions of tariffs relating to the furnishing of cars for livestock shipments; and it provided for the virtual pooling of livestock cars at all stations or terminals.

A. S. M. E. Officers Nominated

Nominations for 1943 officers of the American Society of Mechanical Engineers were announced by H. W. Smith, chairman of the nominating committee, following its sessions held during the semi-annual meeting of the society in Cleveland. Election will be held by letter ballot closing September 22.

The nominees are: President, Harold V. Coes, vice-president of Ford, Bacon & Davis, Inc., New York; vice-presidents, Joseph W. Eshelman, president of Eshelman & Potter, Birmingham, Ala.; Thomas E. Purcell, general superintendent of power stations, Duquesne Light Co., Pittsburgh; Guy T. Shoemaker, vice-president of Kansas City Power & Light Co., Kansas City, Mo., and Walter J. Wohlenberg, professor of mechanical engineering, Yale University, New Haven; managers, Roscoe W. Morton, professor of mechanical engineering, University of Tennessee, Knoxville; Albert E. White, director of engineering research, University of Michigan, Ann Arbor, and Alexander R. Stevenson, Jr., staff assistant to vice-president, General Electric Co., Schenectady, N. Y.

Pelley Notifies Carriers on Lounge Cars

J. J. Pelley, President of the Association of American Railroads, has notified the railroads that observation cars with accommodations for sleeping less than eight passengers; club cars with accommodations for sleeping less than eight passengers; and lounge, taproom or tavern cars, which do not have sleeping accommodations, must be discontinued on June 30, in line with the program adopted by the members of that Association on May 29.

Texas Intrastate Rates

Railroads serving Texas have asked the Interstate Commerce Commission to investigate the refusal of the Railroad Commission of Texas to permit the carriers to bring their intrastate passenger and freight rates into line with the recent increases allowed in the Ex Parte 148 rate case.

The petition of the Texas lines told the commission that the Railroad Commission of Texas has refused to increase first class passenger fares to the 3.3-cent per mile overall average now in effect on interstate traffic because of a Texas statute which limits fares to three cents per mile. The petition goes on to say that the Texas commission has permitted the railroads to increase their fares to three cents per mile, but has refused to permit the Ex Parte 148 freight rate increases to go into effect on intrastate traffic.

Pacific Motor Trucking Company Gets Certificates

Passing upon some 80 applications of Pacific Motor Trucking Company, the Interstate Commerce Commission, Division 5, has granted the Southern Pacific subsidiary certificates covering trucking operations as a common carrier of general and special commodities over various routes between points in California and Oregon. The title case is No. MC-78786.

Because a majority of the applications involved Pacific's "grandfather" rights, the commission had to decide whether or not in such cases ("wherein applicant has a statutory right to a certificate authorizing it to continue such operations as it was conducting" on the "grandfather" date) it should impose conditions designed to insure that the operations remain auxiliary to rail service. In prior cases where such conditions were imposed, the proposed operations had to be justified on a showing of public convenience and necessity.

The commission decided that the conditions should not be imposed "indiscriminately" in a "grandfather-clause" case, but it nevertheless held that it should attach

such of the conditions as were consistent with the actual operations on and prior to the "grandfather" date. And in that connection it found that, except in a few instances, Pacific has offered no service directly to the public, "but operates only as an underlying carrier for the Southern Pacific, its affiliates, independent short-line rail carriers, or the Railway Express Agency, Inc." Thus in all but a couple of the certificates granted, it imposed the usual conditions insofar as it considered them necessary.

Freight Car Loading

Loadings of revenue freight for the week ended June 20 totaled 844,913 cars, the Association of American Railroads announced on June 25. This was an increase of 12,187 cars, or 1.5 per cent, above the preceding week, a decrease of 40,626 cars, or 4.6 per cent, below the corresponding week last year, and an increase of 116,420 cars, or 16 per cent, above the comparable 1940 week.

As reported in last week's issue, loadings of revenue freight for the week ended June 13 totaled 832,726 cars, and the summary for that week, compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For Week Ended Saturday, June 13

District	1942	1941	1940
Eastern	155,110	188,164	152,011
Allegheny	183,495	195,068	152,475
Pocahontas	57,102	59,013	48,685
Southern	120,990	119,343	98,061
Northwestern ..	135,845	132,063	116,798
Central Western	114,866	116,719	100,932
Southwestern ..	65,318	52,604	43,959
Total Western Districts	316,029	301,386	261,689
Total All Roads	832,726	862,974	712,921
Commodities			
Grain and grain products	34,686	37,006	30,456
Live stock	11,159	10,007	9,709
Coal	166,341	158,621	122,037
Coke	14,231	13,165	10,442
Forest products.	48,261	42,403	34,280
Ore	86,285	73,549	64,230
Merchandise l.c.l.	94,556	159,597	148,354
Miscellaneous ..	377,207	368,626	293,413
June 13	832,726	862,974	712,921
June 6	854,689	852,940	702,892
May 30	795,756	801,783	639,120
May 23	837,748	866,027	687,480
May 16	839,052	860,802	679,065
Cumulative Total, 24 Weeks ...	19,361,651	18,056,689	15,433,395

In Canada.—Carloadings for the week ended June 13 totaled 65,388 compared with 67,539 cars in the previous week and 64,478 in the corresponding week last year, according to the statement of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
June 13, 1942	65,388	33,649
June 6, 1942	67,539	31,341
May 30, 1942	63,386	31,684
June 14, 1941	64,478	31,323
Cumulative Totals for Canada:		
June 13, 1942	1,505,742	768,088
June 14, 1941	1,366,359	696,727
June 15, 1940	1,183,737	587,694

Package Rates and Estimated Weights on Citrus Fruits

Railroad tariffs proposing to abandon the use of estimated weights as a basis for transportation charges on citrus fruits, and to substitute therefor rates stated in amounts per package have been found unlawful by the Interstate Commerce Commission in a report in I. & S. Docket No. 4786. The report also affirms the commission's findings in *Estimated Weights on Citrus Fruits,* 237 I. C. C. 313; and it prescribes reasonable and non-prejudicial estimated weights on citrus fruit from Florida, Texas, California and Arizona to destinations throughout the country, and reasonable non-prejudicial charges for the transportation of such traffic.

The majority report covers 79 mimeographed sheets; and brief separate expressions came from Commissioner Johnson, concurring, and Commissioners Lee and Patterson, both dissenting. Acting Chairman Aitchison joined in the Lee expression while Commissioner Mahaffie agreed with Mr. Patterson.

I. C. Honors Veterans

Members of the board of directors and more than 200 executive and other officers of the Illinois Central gathered at luncheon at the Hotel Stevens, Chicago, on June 19 to honor 32 employees who had completed 50 years of service with that railway and who were presented with gold passes commemorating their service by J. L. Beven, president. This brings the total of employees of this railway who have received this recognition and who are still living to 99. A feature of the luncheon was a presentation to the railway of a Minute Man flag by A. J. Dunn, a representative of the United States Treasury Department, in recognition of the fact that more than 90 per cent of the employees of the railway have subscribed to the payroll deduction plan for the purchase of war savings bonds.

"Broadway" and "Century" Extra Fare Reduced

The extra fare, or "service charge," effective on the "Twentieth Century Limited" of the New York Central and the "Broadway Limited" of the Pennsylvania between New York and Chicago has been reduced from $7.50 to $5.00, commencing June 15. Proportionate reductions apply between intermediate points served by these trains. This step was taken, the New York Central announces, because current conditions require that every train carry its full share of the steadily increasing passenger movement. It is expected that the reduction will encourage more customers to take advantage of the 16-hour schedule of the extra fare trains, so relieving some of the demand for space on the regular fare trains between these cities.

N. Y. Commission Demands Cleaner Cars

The New York Public Service Commission has instituted a formal investigation of the "on time" performance and sanitary conditions of the Pennsylvania's passenger trains. The first hearing will take place in New York July 9.

Last January the Commission informed the railroad that its investigations showed that nearly half of the Pennsylvania's trains on the Buffalo and Williamsport divisions were from 30 to 45 minutes late at their destinations and that many of the passenger cars on the central and eastern divisions were improperly cleaned. This announcement follows by a few days a warning issued by the Commission in which the Long Island was also directed to take prompt measures to keep its passenger cars cleaner. Other carriers have heretofore evoked similar complaints from this regulatory body.

Storage Charges at Baltimore

Examiner J. P. McGrath has recommended in a proposed report an Interstate Commerce Commission finding to the effect that railroads providing commercial storage services at Baltimore, Md., are charging for such services on certain commodities non-compensatory rates which result in violation of the Interstate Commerce Act. The examiner would have the commission direct the railroads to cease and desist from such violations.

The report is in No. 28420, the investigation instituted by the commission into the lawfulness of all warehousing and storage rates, charges, rules, regulations and practices of common carriers by railroads at north Atlantic ports, other than New York. The situation at Baltimore was the first investigated.

Morse to Arbitrate Vacations Issues

Wayne L. Morse, Dean of the University of Oregon Law School and chairman of last year's Emergency Board which settled the wage dispute, has been named by the National Mediation Board to arbitrate certain major issues which have arisen in the interpretations to be placed on the vacations-with-pay agreement.

As noted in last week's issue, the railroads and the 14 non-operating brotherhoods became deadlocked in their negotiations over the vacations-with-pay question and asked the Mediation Board to choose an arbitrator. The Board chose Mr. Morse, who has been accepted by both of the parties, and it is understood that the issues will be arbitrated some time in July.

The proceeding is outside the jurisdiction of the Railway Labor Act, and the parties will share the expense of the arbitration.

War Changes Schedules of Streamliners

Western railroads have lengthened the schedules of several streamlined passenger trains in an effort to gear the requirements of rail transportation to the war tempo. The schedules of Chicago-Pacific Coast streamliners have been lengthened from 39¾ hr. to 41¾ hr., and the fast Chicago-Denver schedules have been increased from 16 hr. to 17 hr. At the same time minor adjustments have been made in the schedules of other trains between other points. Changes in the schedules of the City of San Francisco operated over the Chicago & North Western—Union Pacific—Southern Pacific and the City of Los Angeles and the City of Portland of the C. & N. W.-U. P. were effective on June 20, while those of the Super Chief and the El Capitan of the Atchison, Topeka & Santa Fe will be effective on July 7. Chicago-Denver schedules of the City of Denver of the Chicago & North Western—Union Pacific and the Denver Zephyr of the Chicago, Burlington & Quincy will be effective on June 28. About 40 changes in the schedules of other trains on the Burlington system, including 10 to 15 min. adjustments

between Omaha, Neb., and Kansas City, Mo,. are being made.

The schedule of the Exposition Flyer, operated over the Burlington, the Denver & Rio Grande Western and the Western Pacific between Chicago and San Francisco will be changed on July 5 so that the streamlined train, the Prospector, operating between Denver, Colo., and Salt Lake City, Utah, can be assigned to other service. Under the new schedule, the westbound Exposition Flyer will lay over 7 hr. 25 min. at Denver.

Status of Universal Air Freight Corporation

Examiners J. Francis Reilly and Ralph L. Wiser have recommended in a proposed report that the Civil Aeronautics Board find Universal Air Freight Corporation, affiliate of the Universal Carloading & Distributing Company, to be an air carrier within the meaning of section 401 of the Civil Aeronautics Act. Also, the *examiners* would find that Universal violates section 401 by engaging in air transportation without a certificate; and they would have the Board issue a cease and desist order.

Universal, which began operations in July, 1941, operates much like the forwarders do on the railroads, consolidating small shipments into larger packages which it tenders to the Railway Express Agency for shipment by air express. The present proceeding, Docket No. 723, is an investigation instituted by C. A. B. in an order issued March 9, 1942.

Status of Stockyard Companies

Reporting after further hearing in the Ex Parte No. 127 proceeding, the Interstate Commerce Commission has found that various stockyard companies which have rearranged their set-ups are no longer common carriers by railroad subject to the Interstate Commerce Act. The companies affected by that finding are the Cincinnati Union Stock Yard Company; the Los Angeles Union Stock Yards Company; the South San Francisco Union Stock Yards Company; the Portland Union Stock Yards Company; the St. Paul Union Stockyards Company; and the Cleveland Union Stock Yards Company.

Meanwhile the report also held that the Stockyards Railway Company, St. Paul, the Cincinnati Livestock Handling Company; the South San Francisco Livestock Handling Company; and the Livestock Terminal Service Company, Portland, are common carriers by railroad subject to the act.

Equipment Installed

Class I railroads put 44,546 new freight cars in service in the first five months of this year, according to the Association of American Railroads. The total included 30,177 box, 12,498 coal, 1,037 flat, 207 refrigerator, and 627 miscellaneous cars.

New freight cars on order on June 1 totaled 49,548 compared with 65,047 on the same day last year. The former figure included 20,126 box, 24,546 coal, 2,803 flat, 1,197 refrigerator, 300 stock, and 576 miscellaneous cars.

Locomotives installed in the first five months totaled 292, including 119 steam and 173 electric and Diesel-electric. In the same period last year 218 new locomotives were put in service, of which 53 were steam and 165 were electric and Diesel-electric.

New locomotives on order on June 1 totaled 950, which included 395 steam and 555 electric and Diesel-electric. The comparable figures for June 1, last year, were 517 new locomotives, including 231 steam and 286 new electric and Diesel-electric.

North Western Office Building in Chicago Leased by U. S.

The United States government has leased the 14-story Chicago & North Western office building at Jackson boulevard and Franklin street in Chicago for the housing of the regional offices of the War Production Board, the Office of Price Administration, the Office for Emergency Management, the Office of Defense Transportation, the Office of Civilian Defense, the training-within-industry branch of the labor division of W. P. B., and the War Labor Board, effective September 1. The building was erected in 1905 and was used for the general offices of the railroad until June, 1929.

The railway is spending approximately $250,000 on rehabilitation to meet the needs of the new tenant. The terms of the lease provide for occupancy of 150,000 sq. ft. out of a total of 200,000 sq. ft. in the building, with an option on the remaining 50,000 sq. ft. The lease provides for a rental of $15,625 per month for the first 12 months and $12,500 per month thereafter and runs for one year with a right to renew from year to year, but not beyond June 30, 1952.

U. P. Donates Historical Bronze to War Production

A copper bronze buffalo head and a bas relief which have adorned the east and west ends, respectively, of the Union Pacific bridge over the Missouri river at Omaha, Neb., since 1888, have been salvaged for war material by the railroad. The sculptures were made in 1887 and placed on the bridge on order of Charles Francis Adams, who was president of the Union Pacific when the second bridge was built over the Missouri river in 1888. The buffalo head and bas relief were transferred to the third, and present structure, upon its completion in 1916. The modeler of the pieces was Edward Kemey of Perth Amboy, N. J., and they were cast by Etienne Favy of New York. Symbolic of the West, the head was chosen to represent the wildness of the plains, and was placed on the east end of the bridge so that it could be most easily seen by eastbound travelers from the rear end of trains. At the west end of the previous bridge, and also later transferred to the west end of the present bridge, was the bas relief. It bore a design consisting of a plow, an anchor, and a steam hammer, meant to symbolize the agriculture, commerce and manufacturing of the East.

The Buffalo Head Contains 2,400 lb. of Bronze

The weight of the bronze head, which is 7½ ft. high, 6 ft. wide and 4¾ ft. thick, is estimated to be 2,400 lb., not including 1,000 lb. of steel in the framework. It is estimated the bas relief, which is 5 ft. high, 6 ft. wide and 4 in. thick, contains 1,000 lb. of bronze and steel, including the frame supports.

Southeast Advisory Board Talks Stress Job Ahead

Reports of current accomplishments and warnings of greater tests ahead featured the regular meeting of the Southeast Shippers' Advisory Board, held in Atlanta June 18.

The address of Col. Robert S. Henry, assistant to the president of the A. A. R., stressed the vital jobs ahead of the transportation team—shipper-railroad-receiver—particularly the necessity of making available equipment to handle the growing load while more cars and locomotives can not be obtained. T. M. Healy, district manager of the A. A. R. car service division at Atlanta, outlined the accomplishments of that organization, with the cooperation of the shippers and the railroads, in avoiding congestion and delay in the movement of freight.

A. W. Vogtle, president of the National Association of Shippers' Advisory Boards, declared the immediate prospect is "not only critical but desperate." Such conditions, he continued, require that intelligent planning and energetic execution *create* the needed cars and locomotives that cannot be built because of shortages of critical materials.

Applying a lesson from the current emergency to future normal times, the speaker remarked that railroads sell ton-miles but spend train-miles, so the key to low cost transportation is heavy loading. Recent accomplishments of shipper-carrier cooperation in more efficient utilization of the latent capacity of the railroads were reviewed in some detail, and in this connection Mr. Vogtle predicted that "definitely there will be no rail transportation shortage at this year's fall peak."

Claim Agents Meet at Chicago

Grade crossing accidents in the United States increased five per cent in 1941 as compared with 1940, according to a report of the Grade Crossing Committee of the Association of Railway Claim Agents at the annual meeting of the association at Chicago on June 17. Grade crossing accidents, which numbered 4,320 in 1941 and 4,104 in 1940, resulted in the death of 1,931 persons in 1941 and 1,808 in 1940 and injury to 4,855 people in 1941 and 4,632 in

1940. There were 1,347 accidents in 1941 in which vehicles ran into the side of trains, compared with 1,303 such accidents in 1940. In these accidents 310 persons were killed and 1,908 were injured in 1941. Automobiles, including trucks, on the highways totaled 34,355,100 in 1941 and 32,025,365 in 1940.

The association had planned a three-day meeting at Buffalo, N. Y., on June 17-19, but due to prevailing conditions decided upon a one-day meeting at Chicago. The members voted to hold the next annual meeting in Buffalo but at the same time decided to postpone future meetings until war conditions permit their resumption.

Officers elected for the ensuing year were as follows: President, H. L. Hanson, chief claim agent of the New York Central at New York; vice-presidents, C. W. Krohl, general claims attorney of the Chicago, Burlington & Quincy at Chicago, P. C. Garrett, general claim agent of the Baltimore & Ohio at Baltimore, Md., and O. F. Gnadinger, claim agent of the Elgin, Joliet & Eastern at Joliet, Ill.; and secretary-treasurer, F. L. Johnson, claim agent of the Alton at Chicago, re-elected.

Topics discussed at the meeting included: Trend of Decisions Under the Federal Employers' Liability Act Since the 1939 Amendments, by F. B. McConaughy, attorney of the Louisville & Nashville; Claim Department Management-Training of Personnel, by E. N. Muldoon, general claim agent of the Chicago, North Shore & Milwaukee; Modern Photography as a Valuable Adjunct in the Preparation and Defense of Claims, by Carter H. Harrison, claim agent of the New York Central; and Are Safety Rules Effective? by W. E. Davison, district claim agent of the Missouri Pacific.

Mandatory Depreciation on Road Property Effective Jan. 1, 1943

Orders prescribing mandatory depreciation accounting, effective January 1, 1943, for roadway property, except track items such as rails, ties, ballast, and other track materials, have been issued by the Interstate Commerce Commission. The orders, dated June 8 and made public June 20, comprise a follow-through from the commission's January 19 order modifying the rules covering optional depreciating accounting for road property in such a way as to substitute the group plan for the unit plan of accruals.

As suggested in the *Railway Age* of February 7, page 346, the January 19 order proved to be a preview of the mandatory orders now issued. The former, however, included road and equipment primary accounts 8—Ties, 9—Rails, and 10—Other track material among its list of "depreciable" accounts. Those three are eliminated from the mandatory order's list which follows: 5—Tunnels and subways; 6—Bridges, trestles, and culverts; 7—Elevated structures; 13—Fences, snowsheds, and signs; 16—Station and office buildings; 17—Roadway buildings; 18—Water stations; 19—Fuel stations; 20—Shops and enginehouses; 21—Grain elevators; 22—Storage warehouses; 23—Wharves and docks; 24—Coal and ore wharves; 27—Signals and interlockers; 29—Power plants; 31—Power transmission systems; 35—Miscellaneous structures; 37—Roadway machines; 44—Shop machinery; 45—Power plant machinery.

The exemption of the strictly track items from the orders accords with the position taken on that phase of the depreciation matter by the Association of American Railroads board of directors which last fall instructed the A. A. R. Accounting Division to negotiate with the commission to that end. Four orders were issued, modifying in turn the Classification of Operating Revenues and Expenses; the Classification of Income, Profit and Loss and General Balance Sheet Accounts; the Classification of Investment in Road and Equipment; and Accounting Bulletin No. 15, Interpretations of Accounting Classifications for Steam Roads.

Under the prescribed rules, the charges for currently accruing depreciation are to be computed in conformity with the group plan by applying to the original cost or estimated original cost of the road property as found by the commission's Bureau of Valuation such percentage rates "as will distribute the service value by the straight-line method in equal annual charges to operating expenses or other accounts during the estimated life of the property." As soon as the information can be assembled, each carrier is to submit its proposed annual rates; but until such time as those rates have been computed, the carrier must base its depreciation charges upon percentage rates obtained from the Bureau of Valuation, "which is prepared to furnish such rates upon request."

Arbitration Ordered in D. & H. Adjustment Board Case

The United States Circuit Court of Appeals on June 18 directed the federal district court at Chicago to consider a motion that would compel the National Railroad Adjustment Board to hold hearings and act on 170 labor disputes which involve the Delaware & Hudson and which have been in controversy since 1936. The Delaware & Hudson in June, 1941, filed suit against ten members of Division I of the National Railroad Adjustment Board, seeking by this means to compel Royal A. Stone, referee, and the members of Division I to make formal awards on the proposals offered in D. & H. cases that were suddenly withdrawn by labor representatives in 1940. The D. & H. sought to have the court direct the defendant, including Mr. Stone, to continue their original hearings on the disputes and enter of record the permanent denial and dismissal with prejudice in each dispute or accept the previous decisions of Referee Stone. The railway also sought a temporary injunction to prevent Division I from taking action on the alleged "rehashed" cases which were filed in lots of five.

Originally 170 disputes were submitted to the board and, following the deadlock between the five carrier and five labor members of Division I, Mr. Stone was appointed referee. He heard the cases and was engaged in completing his decisions on them and had stated that 73 cases were complete when the labor organizations suddenly withdrew the complaints allegedly as a result of the premature discovery of the nature of the forthcoming decisions.

Dismissal of the D. & H. suit was asked by the Brotherhood of Railroad Trainmen, the Order of Railway Conductors and the Brotherhood of Locomotive Firemen & Enginemen, and the case was dismissed by Federal Judge Michael L. Igoe at Chicago on September 17, 1941. The court held that it lacked jurisdiction to pass on the merits of the railroad's suit. Later the railroad appealed.

In the opinion by Presiding Judge Evan A. Evans, with the concurrence of Judges Will M. Sparks and Otto L. Kerner, the Circuit court reversed the previous judgment by Judge Igoe, ruling that the lower court had jurisdiction. "Any other view would do injustice to the clear intent of Congress; it would make arbitration proceedings a farce," the appeals court said. The court pointed out that withdrawal from arbitration by the unions was in the face of an impending decision against them and suggested that if withdrawal were fair for the unions and the case should be heard again, "would it not be fair for the railroads to withdraw if they found the arbitration going against them?" Such procedure, to defeat the principle of arbitration, is only "to give effects to efforts which are lacking in good faith, good sportsmanship and good conscience," said the court.

Retirement Board Operations

Retirement benefits certified in March totaled $10,655,528, bringing the total payments from the beginning of operation in 1937 to $524,969,418. Through March the Board has certified 157,965 employee annuities, 48,559 pensions to former carrier pensioners, 3,240 survivor annuities, 6,266 death benefit annuities and 52,042 lump sum death benefits.

Improved employment conditions in the railroad industry have led to a decrease in applications for employee annuities. A total of 14,157 applications received by the board in the 9 months ending March, 1942, was 14.1 per cent less than the total for the corresponding months last year. Chiefly, as the result of the drop in applications, certifications of new employee annuities averaged only 1,474 a month for the last 9 months of the fiscal year 1942 as compared with the 1941 monthly average of 1,721, a decline of 14.4 per cent. In March the Board certified 1,249 new annuities.

Employee annuities in force at the end of March totaled 125,052, with a monthly amount payable of $8,240,499. The average monthly payment was $65.90. Pensions in force at the end of the month numbered 28,437. The total monthly amount payable was $1,676,229 and the average payment $58.95.

Collections under the Carriers' Taxing Act for the first quarter of 1942 amounted to $47,011,495, 34.4 per cent higher than in the first quarter of 1941. Total tax collections since the beginning of operations amounted to $642,400,283.

Military service in a war service period since January 1, 1937, is now creditable toward annuities and death benefits under the Railroad Retirement Act. Amendment to the Act was signed by President Roosevelt on April 8. Credit for military service

Continued on next left-hand page

"The Freight Train provides the circulation that means Life To The Nation"

C & O 2-6-6-6 "Allegheny Type" locomotive built by Lima Locomotive Works, Inc.

Now, more than ever, the continuous hauling of heavier freight at higher speeds is of vital importance to the preservation of our American way of life.

The railroads of America have brought the handling of freight to a point of unprecedented efficiency. Over the past two decades average freight-train speed has increased 45 per cent, freight-car capacity has increased from 42 tons to 50, and a day's freight-train run has been almost doubled.

Modern Lima Super-Power Steam Locomotives, as exemplified in the new C & O 2-6-6-6 "Allegheny Type" locomotives now in service, have an important part in this achievement. Because of their greater drawbar horsepower and faster speeds they are helping America to "keep 'em rolling".

LIMA LOCOMOTIVE WORKS, INCORPORATED, LIMA, OHIO

LIMA LOCOMOTIVE WORKS INCORPORATED

prior to January 1, 1937, was approved by the President on October 8, 1940.

Unemployment insurance operations in March continued the decline begun in January. Claims received in the regional offices in the four weeks, February 28 to March 27, totaled 62,885, a drop of nearly 11 per cent from the February figure. Applications for certificate of benefit rights declined even more, from 4,616 in February to 2,542 in March.

Benefits certified in March totaled $1,175,733, about $153,000 less than in the preceding month. The average benefit on claims with a maximum of 10 compensable days was $20.47.

Employment service operations expanded in March with the opening of the hiring season for track labor. Notifications were received of 4,793 openings, of which nearly 4,500 were with railroad employees. More than 6,200 workers were referred to available vacancies and 3,143 were placed. Nearly 62 per cent of all March placements, or 1,950, were as track laborers.

Because of the difficulties arising out of the Board's removal from Washington to 844 Rush Street, Chicago, there will be no issue of the Monthly Review for the month of May. The Board is hopeful that publication will be resumed in June.

More Bus Riders Than Rail Coach Passengers in March

Maintaining and bettering the lead which they gained for the first time in February, Class I bus lines in March carried 23,280,965 passengers as compared with the 21,089,215 carried in railroad coaches. The bus figure represents an increase of 54.6 per cent as compared with March, 1941, while the rail figure was up 22.9 per cent.

Meanwhile, however, the railroad revenues from March coach business totaled $27,373,582, up 58.8 per cent from the previous year, while the March revenues of the Class I bus lines were $16,45,910, up 63.4 per cent.

Pullman Warns Vacationers to Keep Plans Flexible

Vacation-bound civilians were warned by the Pullman Company on June 23 to keep travel plans flexible this summer. The spokesman was George A. Kelly, vice-president, who said, "Troop travel is at an all-time high and is still increasing and civilian passenger traffic is now running 30 per cent ahead of 1941. The situation for vacationers may not become acute, but those who expect to take trips by rail should be prepared to make last minute adjustments in their plans if necessary. Nearly 2,500,000 troops were moved by Pullman during the first five months of 1942, while in May, 525,000 soldiers, sailors and marines were transported in sleepers—a 13 per cent increase above the average totals of the four preceding months.

"So far the railroads and the Pullman Company have been able to meet all demands for troop transportation without a hitch and to keep up with increased civilian demands. Nobody can predict what will happen from now on but vacationers would be wise to take certain precautions against disappointment."

Supply Trade

William M. Black, president of the **American Manganese Steel Division** of the **American Brake Shoe & Foundry Co.,** Chicago Heights, Ill., has also been elected vice-president of the American Brake Shoe & Foundry Co., New York.

William M. Black

Mr. Black joined this division in 1912 and became its general sales manager in 1934 and vice-president in 1935. He was elected president in 1940 and will continue in that capacity. He served as a lieutenant of ordnance in World War I.

C. F. Green of **Fairmont Railway Motors, Inc.,** Fairmont, Minn., has been granted a leave of absence for the duration and is now serving in the industrial machinery division, transportation section, of the War Production Board at Washington, D. C.

Roy P. Williamson, sales manager of the Industrial Jobber division of the **Buda Company,** Harvey, Ill., has been appointed sales manager of the Railroad division, with headquarters as before at Harvey. Mr. Williamson was born at Washington Courthouse, Ohio, on June 8, 1904, and

Roy P. Williamson

attended the University of Michigan. In 1928 he went with the Industrial Brownhoist Corporation at Chicago as a sales engineer and in 1932 he went with the Shaw-Box Crane division of Manning, Maxwell & Moore, Inc., as assistant manager of the Chicago office. Four years later, he became associated with the Gustin-Bacon Manufacturing Company in the same capacity and in 1940 he went with the Buda Company as sales manager of the Industrial Jobber division, which position he held until his recent appointment.

W. L. Sutherland has been placed in charge of a new branch office established by the **Gisholt Machine Company** of Madison, Wis., at 1124 Park Building, Pittsburgh, Pa., to serve its customers in the southeastern Ohio, West Virginia, western Pennsylvania and western Maryland areas.

Construction of a new battery of coke ovens, adjacent to the coke plant of the Gary, Ind., works of the **Carnegie-Illinois Steel Corporation,** will be begun in the near future. The Carnegie-Illinois Steel Corporation will act for the Defense Plant Corporation in the construction of these new coke ovens, which, upon completion, will be leased and operated by Carnegie-Illinois. It is expected that the new coke ovens, which will have a capacity of about 400,000 tons of coke annually, will be completed and in operation in about a year's time.

OBITUARY

Edward M. Smith, assistant sales manager of the Electro-Motive Division of

Edward M. Smith

General Motors Corporation, LaGrange, Ill., died in that city on June 18. He was born in Susquehanna, Pa., on January 22, 1890, and after graduating from Laurel Hill Academy in that city, in 1907, entered railway service as an office clerk on the Erie. Later he was transferred to New York and still later was promoted to special representative at Youngstown. In 1935 he resigned from this position to become assistant sales manager of Electro-Motive.

Pierre G. Jenks, president of the Pullman-Standard Car Export Company, and a director of the Pullman-Standard Car Manufacturing Company, whose death June 14 was reported in the *Railway Age* of June 20, began his business career as a stenographer with the Pressed Steel Car Company on its formation in 1899. He was

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THE
FRANKLIN SYSTEM
OF
STEAM DISTRIBUTION

The steam locomotive is possessed of a 33⅓% latent power that is forced to remain dormant because of the restrictions of the conventional valve and valve gear. It is now possible to realize *productive work* from this latent power by incorporating The Franklin System of Steam Distribution.

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO
In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

elected treasurer of that company in 1903. He subsequently was associated with the Banning Cooper Company and in 1913 joined the Standard Steel Car Company as manager of its Hammond, Ind., plant. He was elected vice-president of that company in 1922 and in the merger with Pull-

Pierre G. Jenks

man, Inc., in 1930, became president of the Pullman-Standard Car Export Company in charge of all foreign operations. Mr. Jenks served in the Spanish-American War and, in World War I, as a major in the field artillery. He was 66 years of age.

War Bonds as Bonuses for Steady Help

The Bullard Company, Bridgeport, Conn., will distribute weekly among its employees approximately $30,000 worth of war savings stamps as a reward for prompt and regular attendance. Those employees winning stamps will become automatically eligible for a weekly drawing for 20 war bonds valued at a total of $950. The $30,000 in stamps represents a 10 per cent premium to be paid on all wages, including overtime, for employees who report for duty on time daily, and work their full schedule of hours for the week. While the plan's primary purpose is to insure attendance, its other benefits will include the building up of a financial cushion for employees for use during the re-tooling period following the war.

A. C. F. Issues Annual Report

Reflecting for the second time in annual statements its increasing participation in the war effort, the forty-third report of the American Car & Foundry Co. for the fiscal year ended April 30, 1942, shows consolidated net sales billed of $216,336,567, with a backlog of business on the books for the fiscal year now current of $424,810,772. A substantial proportion of both items is derived from the company's normal, as distinguished from its war-time, activities. Sales in the preceding fiscal year were $67,192,012.

Net earnings of the company and its subsidiaries amounted to $9,275,376 as compared with $5,161,129 in the preceding fiscal year, after all charges including interest, depreciation, repairs and provision for estimated income and excess profits taxes. In the fiscal year ended April 30, 1940, the company reported a net loss of $10,777.

The past year's net earnings were equal to $12.09 per share on the company's common stock after preferred dividends, against $5.23 per share in the fiscal year ended April 30, 1941. These earnings were after allowing a total of $38,507,562 for estimated taxes compared with a provision of $2,194,927 in the preceding fiscal year. The consolidated balance sheet as of April 30, 1942, shows total current assets of $95,923,736, and current liabilities of $56,553,483. As of April 30, 1941, total current assets were $46,283,860 and current liabilities $25,882,101. An indebtedness of $10,000,000 to banks with which the company entered upon the year just closed was entirely liquidated.

In the annual report, Charles J. Hardy, president, draws particular attention to an item of $11,143,767 included in the Plant and Property account on the balance sheet as representing expenditures made by the company out of its own resources, and for its own account, to provide additional facilities sorely needed for the production of materials of warfare. Mr. Hardy expressed uncertainty as to what portion of the profit resulting from the year's operations will be available for dividends pending determination of the effect of recent legislation authorizing the government to re-negotiate contracts having to do with the country's war program so as to recover excessive profits—which was passed by Congress without any definement of what constitutes an excessive as distinguished from a fair and reasonable profit.

Equipment and Supplies

FREIGHT CARS

THE COLUMBIA STEEL COMPANY is inquiring for 10 flat cars of 50 tons' capacity.

THE GREAT NORTHERN has ordered 500 ore cars of 75 tons' capacity from the Bethlehem Steel Company. These cars were included in the reported allocation of 18,000 freight cars authorized for 1942 construction by the WPB as listed in the *Railway Age* of June 20. Authorization by the railroad's board of directors for the purchase of this equipment was reported in the *Railway Age* of April 4.

IRON AND STEEL

THE PITTSBURGH & WEST VIRGINIA has placed an order for 3,005 gross tons of rail for the year 1942 with the Carnegie-Illinois Steel Corporation.

SIGNALING

THE SOUTHERN PACIFIC COMPANY has placed an order with the Union Switch & Signal Co. covering the required signaling materials for a 33-mile centralized traffic control installation on the San Joaquin Valley Line from Bena, Calif., to Tehachapi. The control machine will be located at Bakersfield, which is 15 miles west of Bena and consequently the C. T. C. code line circuit will extend over a distance of 48 miles. Two line wires will be used throughout for C. T. C. control and telephone and telegraph circuits will be superimposed on these same two wires. The order includes 27 Style M-22-A dual control low voltage D.C. switch layouts and 148 Style H-2 searchlight signals. Instrument houses with telephone booths for the code locations and relay cases for the automatic signal locations will be factory wired. The field installation work is being handled by the railroad company's regular signal construction forces.

Construction

BALTIMORE & OHIO.—The Ross & White Company, Chicago, has recently completed the construction of locomotive sand handling storage towers and coaling equipment for this road at Massillon, Ohio. This company has also installed Red Devil locomotive coalers at Clarksburg, W. Va., and Buckhannon and an N. & W. type cinder plant at Cincinnati, Ohio, for the B. & O.

CHICAGO, BURLINGTON & QUINCY.—This road will spend approximately $750,000 to construct a new three-unit westbound yard at Galesburg, Ill., similar to its eastbound yard, at that point, consisting of a receiving yard, a classification yard and a departure yard to handle the increased traffic and eliminate all possible delays to car movements. The work will call for approximately 250,000 cu. yd. of grading, the rearrangement of about 21 miles of existing trackage and laying 14 miles of new tracks. The yard will have a hump between the receiving yard and the classification yard and 17 electro-pneumatic car retarders and 38 electro-pneumatic switches will be installed. The movement of pusher engines will be controlled by signals at the hump and a one-way telephone system from the hump office to the pusher engines. Teletype will be used between the yard office the hump office and the towers from which the retarders and switches are controlled. Grading work on this project has already been started and the purchase of the necessary materials has been approved by Federal authorities.

NEW YORK CENTRAL.—This railroad has awarded a contract for dredging between transfer bridge No. 6 and pier No. 11-A at Weehawken, N. J., to the Henry DuBois' Sons Company, Inc., of New York.

PITTSBURGH & WEST VIRGINIA.—This railroad has awarded a contract to the Drainage Engineering Company of Middletown, Ohio, for the insertion of steel liner plates and the grouting of a 200-ft. section of its Greentree tunnel, Pittsburgh, Pa., at estimated cost of $50,000.

WESTERN PACIFIC.—Equipment has been purchased from the Ross & White Company, Chicago, for a locomotive sand handling and storage plant, which will be erected by railroad forces at Sacramento, Cal.

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Security Brick Arches

are designed

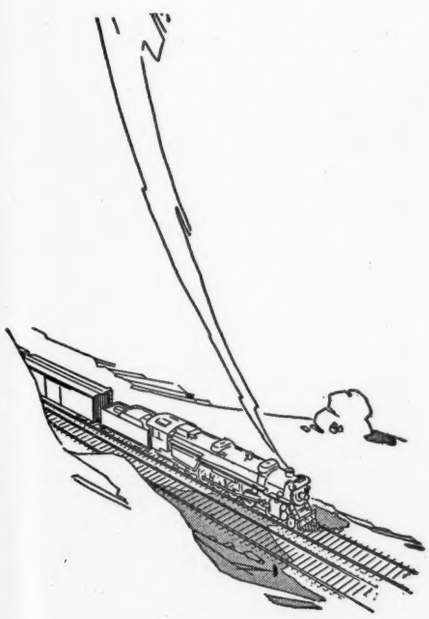
TO SAVE FUEL

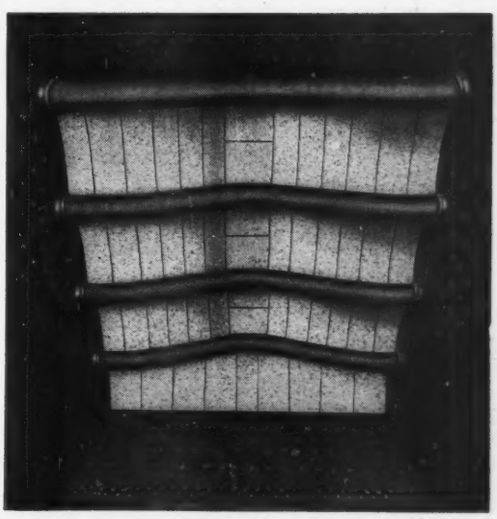
To show its full effectiveness as a fuel saver the firebox brick arch must be designed for the class of power in which it is to work.

Firebox designs are different and for full effectiveness the brick arch must be designed accordingly.

The Security Sectional Brick Arch is the result of many years of engineering and experience in locomotive operation, in studies of combustion and in the making of refractory brick.

Arch Company engineers over a period of many years have gained and applied a knowledge and experience nowhere else available. This knowledge and experience means many thousands of dollars each year in reduced fuel costs to the railroads of this country.

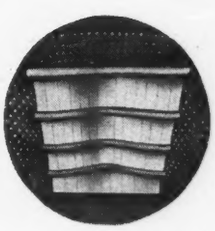




There's More to SECURITY ARCHES *Than Just Brick*

HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists



AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.
Locomotive Combustion Specialists

Financial

ARKANSAS VALLEY.—*Abandonment.*—This company would be authorized to abandon all its interurban lines extending from Wichita, Kans., to Hutchinson, with a branch line from Van Arsdale, Kans., to Newton, 60 miles, if Division 4 of the Interstate Commerce Commission adopts a proposed report of its Examiner W. J. Schutrumpf. Examiner Schutrumpf would have the certificate issued on the condition that the company would sell the line, or any part thereof, to any person, firm, or corporation, offering, within 30 days from the date of the certificate, to purchase it for continued operation, at a price not less than the fair net salvage value thereof.

The War Department had asked that the decision in the case be deferred for 60 days from the date of the hearing to permit it to make an investigation of the possibility of using the line, either in its present location, or dismantling and relaying the tracks in some other location, to furnish transportation facilities for workers at four aircraft factories located south, east and north of Wichita, but not on the line. In connection with the War Department request, wrote Examiner Schutrumpf, "it should be stated that the Interstate Commerce Commission is without authority to order the applicant to engage in passenger-carrying operations."

CENTRAL OF NEW JERSEY.—*Tax Payment.*—The State of New Jersey on June 15 refused to accept a payment of $601,089 offered by the railroad to meet interest charges accrued during the past 10 months on tax arrearages approximating $12,000,000. The offer was made under federal court order to take advantage of New Jersey's new compromise railway tax law, the constitutionality of which has been challenged. Under a provision of the new law which has not been challenged, the State accepted from the railroad $250,000 in franchise taxes.

CHICAGO & NORTH WESTERN.—*Equipment Collateral Substitution.*—Trustee of this railroad, on June 17, informed fiduciary institutions that the LaSalle National Bank of Chicago, trustee for $3,750,000 of 2½ per cent equipment trust certificates issued in February, had agreed to accept $5,000,000 in government securities as collateral for the certificates outstanding on condition that the government securities be sold to provide cash to pay for the freight cars when delivered. Under the plan, the railroad would add $1,250,000 to the $3,750,000 cash derived from sale of the certificates to purchase the $5,000,000 worth of government securities. Changes in the terms of the loan were necessitated by the fact that, under production limitation orders of the War Production Board, delivery of the equipment for which the certificates were issued is uncertain. The bank also agreed that gondola, hopper, flat or box cars may be substituted for the equipment stipulated in the original indenture.

CHICAGO & NORTH WESTERN.—*Abandonment.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a branch line extending from Deadwood, S. D., to Lead, 4.4 miles.

ERIE.—*Pays a Dividend.*—There remain in life but two certainties—death and taxes—the third, as the phrase has it, having vanished June 19 when directors of the Erie declared a dividend of 50 cents a share, payable July 10 to stockholders of record June 30, and applying equally to the common stock and to the certificates of beneficial interest. The common stock dividend is the first to be paid by any Erie company since 1866. It should, however, be recorded that in the recent Erie reorganization, some fixed-interest obligations were exchanged for common stock. These holders have had no sudden influx of unexpected riches, but are merely getting as dividends a part of what they formerly got as interest. The physical plant devoted by the Erie to transportation is not yielding an unprecedented return. The road's net railway operating income for the first four months of 1942 was just about the same as it was in 1929.

GREAT NORTHERN.—*Operation and Acquisition.*—This company has been authorized by Division 4 of the Interstate Commerce Commission (1) to operate the lines of railroad extending southwesterly from Kalispell, Mont., to Marion, 23 miles, and southeasterly from Kalispell, Mont., to Somers, 9.7 miles; and (2) to purchase or lease from the Glacier Park Hotel Company an extension of the Kalispell-Marion segment running in a southerly direction from Marion, Mont., to the end of the line, 7.3 miles.

GULF, MOBILE & OHIO.—*Interlocking Directorate Permit Denied.*—By a vote of five to four the Interstate Commerce Commission has reaffirmed its decision of last year denying William H. Coverdale authority to hold the position of director of this company while holding the position of director in several other railroad companies, details of which were set out in the *Railway Age* of April 28, 1941, page 747. The majority again found that Mr. Coverdale had failed to show that "neither public nor private interests will be adversely affected" by his holding of a directorship with this company while at the same time holding directorships with other carriers.

The present application differs from that of last year in that Mr. Coverdale now desires to eliminate from the list of companies in which he holds directorships the following railroads: Meridian & Memphis, Jackson & Eastern, Birmingham & Northwestern, Tennessee, Alabama & Georgia, Chicago & Eastern Illinois, Gulf, Mobile & Northern, and the New Orleans Great Northern.

Commissioner Mahaffie again dissented and was joined in his expression by Commissioners Aitchison and Miller. He declared that "the record here is devoid of any evidence warranting the finding that the holding of positions as proposed by the applicant will result in diminishing competition or even make possible, much less probable, the diminishing of competition."

ILLINOIS CENTRAL.—*Abandonment by the Yazoo & Mississippi Valley.*—The Yazoo & Mississippi Valley has been denied authority by Division 4 of the Interstate Commerce Commission to abandon a branch line extending southeasterly from Rosedale, Miss., to Boyle, 24.1 miles. The denial was without prejudice to the renewal of the application at the expiration of the present calendar year.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—*Reorganization Plan Amended.*—The Interstate Commerce Commission has issued an amended plan of reorganization for this company The principal change in the commission's final plan, details of which were given in the *Railway Age* of March 28, page 654, deals with the relationship of the new company to the Canadian Pacific.

Under the commission's ruling, the plan is modified so as to increase from 25 per cent to 33 per cent the percentage of the stock of the reorganized company, which, under the terms of the plan, is to be allotted to security holders other than the Canadian Pacific, the 33 per cent of such stock to be subject to purchase by the Canadian Pacific upon the agreement by that road to extend the traffic agreement included in the plan for an additional period of eight years, beginning January 1, 1951, and upon the payment of $2 per share for such stock.

The principal parties in the case state that such a modification would afford the Canadian Pacific the right to vote approximately 45.2 per cent of the total amount of the common stock of the reorganized company as compared with approximately 47 per cent provided for in the plan filed by the trustees and approximately 38.6 per cent provided for in the commission's plan.

NEW YORK CENTRAL.—*Discontinuance of Service.*—This railroad will seek authority to discontinue the Yonkers branch of its Putnam division. It is expected that 2,600 tons of scrap metal can be reclaimed by tearing up the rails.

NEW YORK CENTRAL.—*Abandonment by the Cleveland, Cincinnati, Chicago & St. Louis.*—The Cleveland, Cincinnati, Chicago & St. Louis, and the New York Central, respectively, have asked the Interstate Commerce Commission for authority to abandon a line and the operation thereof extending from Trafalgar, Ind., to Martinsville, 18.4 miles.

NEW YORK CENTRAL.—*Abandonment by the Michigan Central.*—The Michigan Central and the New York Central, respectively, have asked the Interstate Commerce Commission for authority to abandon the Caro branch and the operation thereof extending from Bach, Mich., to Owendale, 5.7 miles.

Abandonment.—This company has been authorized by Division 4 of the Interstate Commerce Commission to abandon a line of railroad extending northwesterly from Poland, N. Y., to Prospect Junction, 8.5 miles.

NORFOLK & WESTERN.—*Abandonment.*—This company has been granted permission by Division 4 of the Interstate Commerce Commission to abandon that portion of its so-called Catawba branch extending from Hanging Rock, Va., to the end of the

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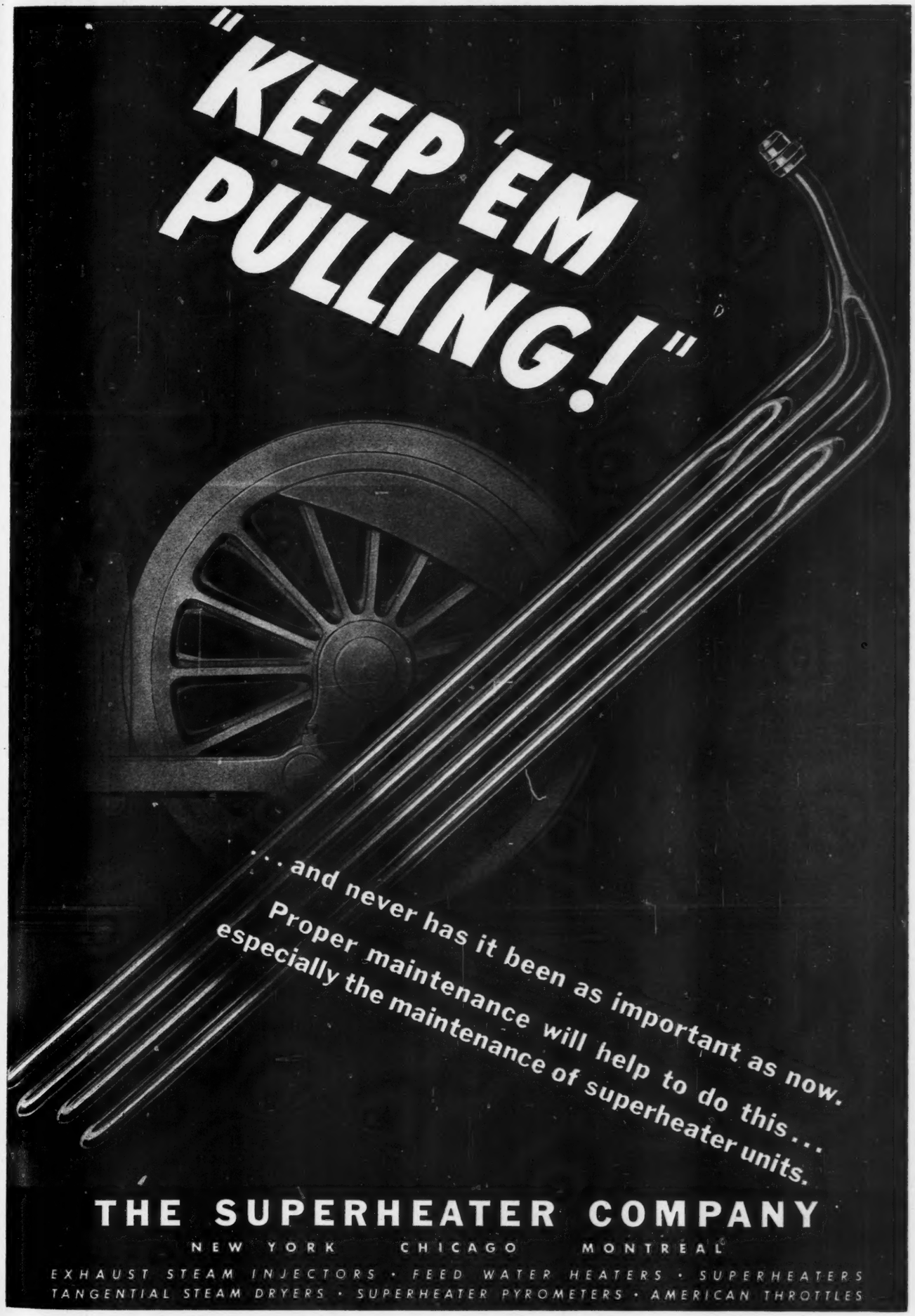
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branch at Catawba Sanatorium Station, five miles.

PENNSYLVANIA. — *New Director.* — James E. Gowen, president of the Girard Trust Company of Philadelphia, Pa., has been elected a director of the Pennsylvania to succeed the late Joseph Wayne, Jr.

PENNSYLVANIA.—*Trackage Rights by the Pennsylvania, Ohio & Detroit.*—The Pennsylvania, Ohio & Detroit has asked the Interstate Commerce Commission for authority to acquire trackage rights over those portions of the lines of the Pittsburgh, Cincinnati, Chicago & St. Louis between Trinway, Ohio, and Newcomerstown, 29 miles, and over the Cleveland & Pittsburgh between Dover, Ohio, and Hudson, 71 miles.

SEABOARD AIR LINE.—*To Retire Certificates.*—Receivers of the Seaboard Air Line have called for (a) tenders of receivers' certificates and (b) offers to reduce obligations from the Pullman-Standard Car Manufacturing Company and the Union Switch & Signal Co. The road was authorized to expend $2,000,000 for this purpose and to make interest payments of approximately $700,000 to holders of certain underlying bonds of the railroad by the Federal District Court at Norfolk, Va., on June 16. The disbursements had been requested by attorneys representing security holders. Tenders and offers are to be submitted not later than July 1.

UNADILLA VALLEY.—*Trackage Rights.*—This company has asked the Interstate Commerce Commission for authority to acquire joint trackage rights over a portion of the line of the New York, Ontario & Western from a point of contact between the two companies' lines at New Berlin Junction, N. Y., to Sidney, 3.1 miles.

WABASH.—*Reorganization Consummated.*—The plan of reorganization of the railway, dated as of March 15, 1941, was consummated on June 18 and the new securities and cash payments to be made will be available for distribution on and after June 26. Reorganization managers for the railroad have given notice to holders of certificates of deposit for the various securities deposited under the deposit agreement and plan of reorganization to surrender such certificates in exchange for the securities, scrip and cash provided in accordance with the plan of reorganization. Preferred stockholders will receive $4.50 in cash in payment of a dividend on the preferred stock for the year 1941, provided by receivers pursuant to a court order. In all, about $8,000,000 will be paid out to the security holders.

Average Prices of Stocks and Bonds

	June 23	Last week	Last year
Average price of 20 representative railway stocks..	24.39	24.25	28.85
Average price of 20 representative railway bonds..	63.18	63.48	64.95

Dividends Declared

Allegheny & Western.—$3.00, semi-annually, payable July 1 to holders of record June 20.

Erie.—Common stock and Certificates of beneficial interest, 50¢, payable July 10 to holders of record June 30.

Richmond, Fredericksburg & Potomac.—$3.00, payable June 30 to holders of record June 22.

Railway Officers

EXECUTIVE

Harry C. Schmidt, general eastern freight agent of the Erie, with headquarters at New York, has been appointed assistant to vice-president in charge of traffic of the Delaware, Lackawanna & Western at New York, effective July 1.

William G. Jones, whose appointment as executive assistant to the receivers of the Seaboard Air Line at Norfolk, Va., was reported in the *Railway Age* of June 20, was born on October 31, 1882, at Hickory, N. C. Mr. Jones entered railroad service in January, 1902, with the Seaboard Air Line, engaging in train and yard service until February, 1915, when he became trainmaster. In March, 1920, he was appointed assistant superintendent; in March, 1922, division superintendent, and in June, 1927, assistant to operating vice-president. Mr. Jones was appointed assistant to president in February, 1929, and in December, 1930, he became assistant to receivers, which position he held until June 11, when he became executive assistant to the receivers.

William Robertson Coe, chairman of the executive committee of the Virginian, has been elected chairman of the board, with headquarters as before at New York, succeeding the late **Adrian H. Larkin,** whose death on February 23 was reported in the *Railway Age* of February 28. Mr. Coe was born at Worcestershire, England, on June 8, 1869, and was educated at Albion Academy, Cardiff, Wales. He began his career in December, 1884, with the insurance firm of Johnson & Higgins at Philadelphia, Pa., becoming manager of the adjusting department at New York in January, 1893. He was elected a director of that firm in 1902 and from 1910 to 1916, he was president, then becoming chairman of the board. Since 1916 Mr. Coe has been active in the affairs of the Virginian and served as director, vice-president and chairman of the executive committee until last January 1, when he relinquished the title of vice-president to his son, William Rogers Coe, but remained chairman of the executive committee and director.

FINANCIAL, LEGAL AND ACCOUNTING

C. J. Sinnitt has been elected secretary of the Spokane International and has also been appointed claims agent and right of way agent, with headquarters at Spokane, Wash.

Alexander F. Brevillier, whose election as comptroller of the Pullman Company, with headquarters at Chicago, was reported in the *Railway Age* of June 13, was born at Erie, Pa., on February 24, 1885, and entered railway service in 1903 with the Pennsylvania, later working for the Pittsburgh & Erie Coal Co., Erie, Pa. On April 1, 1908, he entered the service of the Interstate Commerce Commission at Washington, D. C., as a stenographer and on July 1, 1910, he was transferred to the Chicago office of the Bureau of Accounts, later serving as a clerk assisting examiners and as an examiner. On October 20,

Alexander F. Brevillier

1926, Mr. Brevillier went with the Pullman Company as assistant to the vice-president and comptroller and on March 1, 1936, he was advanced to assistant comptroller. Eight months later he was appointed general auditor and on February 21, 1940, he was elected comptroller of Pullman, Inc. (the holding company). His election as comptroller of the Pullman Company was effective April 15.

OPERATING

William J. Hogan, whose promotion to general manager of the Grand Trunk Western, with headquarters at Detroit, Mich., was reported in the *Railway Age* of June 20, was born at Portland, Me., and entered railway service in September, 1898, as a telegraph operator on the Grand Trunk

William J. Hogan

(now part of the Canadian National) at Island Pond, Vt. After serving in various stations, he was transferred to Montreal, Que., and in 1901 he was promoted to dispatcher at Island Pond. Mr. Hogan then served as dispatcher and chief dispatcher at Durand, Mich., and St. Thomas, Ont., later

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Reduce Operating Costs

THE economies effected by modern power are in a large measure due to the use of quality materials.

It is significant that most of the outstanding revenue producers are equipped with Wear-resisting parts made of HUNT-SPILLER *Air Furnace* GUN IRON.

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Floating Rod Bushings
Finished Parts
Dunbar Sectional Type Packing
Duplex Sectional Type Packing
for Cylinders and Valves
(Duplex Springs for Above
Sectional Packing)
Cylinder Snap Rings
Valve Rings All Shapes
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for Diesel Service

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being advanced to trainmaster. In the spring of 1927, Mr. Hogan was promoted to superintendent of the Pontiac (Mich.) terminals and in October, 1930, he was advanced to superintendent of the Chicago division, with headquarters at Battle Creek, Mich. On June 1, 1936, his jurisdiction was extended to include the Detroit division and on August 1, 1939, he was promoted to general superintendent, with headquarters at Detroit, which position he held until his recent promotion.

J. W. Dietrich, trainmaster on the Chicago, Rock Island & Pacific at El Reno, Okla., has been transferred to Herington, Kan., replacing **R. E. Johnson,** assistant superintendent, who has been transferred to Estherville, Iowa. Mr. Johnson relieves **C. T. Kenney,** who has been granted a leave of absence to serve with the Office of Defense Transportation.

W. H. Edmondson, superintendent of the Grand Trunk Western at Battle Creek, Mich., has been promoted to general superintendent, with headquarters at Detroit, Mich., succeeding **William J. Hogan,** whose promotion to general manager was reported in the *Railway Age* of June 20. **J. M. Munnings,** operating inspector at Detroit, has been advanced to superintendent at Battle Creek, replacing Mr. Edmondson.

C. T. Kenney, trainmaster on the Chicago, Rock Island & Pacific at Cedar Rapids, Iowa, has been promoted to assistant superintendent at Estherville, Iowa, succeeding **F. L. Campion,** who has been transferred to Trenton, Mo., replacing **R. E. Johnson,** who has been transferred to Herington, Kan. Mr. Johnson relieves **R. H. Spicer,** who has been transferred to Inver Grove, Minn., succeeding **R. L. Jones,** who has been appointed trainmaster at Cedar Rapids, replacing Mr. Kenney.

M. H. Gold, superintendent of the South Florida division of the Seaboard Air Line, with headquarters at Tampa, Fla., has been transferred to the Virginia division, with headquarters at Raleigh, N. C., succeeding **H. M. Terrell,** whose death on June 14 was reported in the *Railway Age* of June 20. **C. L. Sauls** has been appointed superintendent of the South Florida division at Tampa, Fla., succeeding Mr. Gold. **C. E. Hix,** assistant general superintendent transportation, has been promoted to general superintendent transportation, with headquarters as before at Norfolk, Va. **C. A. Perry** has been appointed assistant general superintendent transportation and **J. F. Stewart** has been appointed assistant to general superintendent transportation, both with headquarters at Norfolk.

TRAFFIC

Dan W. Vaughan, northwestern traffic agent for the Central of Georgia, with headquarters at Chicago, will retire from active service on June 30.

C. E. Nash, commercial agent on the St. Louis Southwestern at Kansas City, Mo., has been promoted to general agent at Denver, Colo., succeeding **W. C. Huxhold,** who has been transferred to Cleveland, Ohio. Mr. Huxhold replaces **E. P. Becker,** who has been furloughed for military service.

W. G. Whitsett, assistant to general passenger agent on the Atlantic Coast Line at Wilmington, N. C., has been appointed general passenger agent of the Lines south of Birmingham (Ala.) of the Louisville & Nashville, with headquarters at New Orleans, La., succeeding **Ira F. Schwegel,** who will retire from active service on June 30. Mr. Schwegel was born at Richmond, Ind., and entered railway service in 1888, as a telegraph operator on the Cincinnati, Hamilton & Dayton, (now part of the Baltimore & Ohio). In 1893, he was advanced to assistant city ticket agent at Dayton, Ohio, and three years later he was further promoted to city ticket agent. In 1898, Mr. Schwegel became traveling passenger agent with the same headquarters, leaving this company two years later to become district passenger agent for the Wisconsin Central (now part of the Minneapolis, St. Paul & Sault Ste. Marie), at Cincinnati, Ohio. Mr. Schwegel went with the Louisville & Nashville in 1906 as central passenger agent at Cincinnati, Ohio, serving in this position until 1918, when he was appointed district passenger agent at Montgomery Ala., and Camp Sheridan. Two years later he was made general eastern passenger agent at New York and in 1925 he was appointed assistant general passenger agent at Louisville, Ky. Mr. Schwegel was advanced to general passenger agent, with headquarters at New Orleans in November, 1934, which position he held until his retirement.

ENGINEERING & SIGNALING

G. M. Magee, research engineer, Engineering division, Association of American Railroads, with headquarters at Chicago, will, effective June 22, be assigned temporarily to the staff of C. H. Buford, vice-president, Operations and Maintenance department, A. A. R., with headquarters at Washington, D. C. Mr. Magee will continue to supervise the research work of the Engineering division along with his special assignments in Washington.

C. L. Waterbury, assistant engineer on the Chicago, Milwaukee, St. Paul & Pacific at Chicago, has been promoted to division engineer of the Terre Haute division, with headquarters at Terre Haute, Ind., succeeding **T. M. Pajari,** who has been transferred to the Coast division, with headquarters at Tacoma, Wash. Mr. Pajari relieves **J. F. Pinson,** who has been transferred to the Seattle (Wash.) general office.

MECHANICAL

T. C. Shortt, who was recently promoted to superintendent of motive power of the New York, Chicago & St. Louis (Nickel Plate), with headquarters at Cleveland, Ohio, was born at Crewe, Va., on December 9, 1888. It was erroneously reported in the *Railway Age* of June 20 that Mr. Shortt was born on December 9, 1881.

J. P. Kelly, works manager of the Ogden shops of the Canadian Pacific at Calgary, Alta., has been appointed master mechanic of the British Columbia district, with headquarters at Vancouver, B. C., succeeding **G. H. Nowell,** who has been transferred to the Saskatchewan district, with headquarters at Moose Jaw, Sask. Mr. Nowell replaces **A. J. Pentland,** whose transfer to Winnipeg was reported in the *Railway Age* of May 23.

SPECIAL

Roy E. Leigh has been appointed a geologist for the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Spokane, Wash.

E. A. Hodkinson has been appointed a member of the Trunk Line Association Auxiliary Committee, to succeed **L. H. Kentfield,** retired.

OBITUARY

William H. Sievers, comptroller of the Chicago Great Western, with headquarters at Chicago, died in an Oak Park (Ill.) hospital on June 19. He had been in ill

William H. Sievers

health for some time. Mr. Sievers was born at Racine, Wis., on September 25, 1880, and entered railway service in the accounting department of the Chicago, Burlington & Quincy at Omaha in June, 1898, entering the employ of the accounting department of the Great Northern at St. Paul, Minn., four years later. Mr. Sievers entered the service of the Great Western in the accounting department at St. Paul on December 1, 1908, being transferred to Chicago in September, 1909, when the general offices were moved from St. Paul. He was promoted to auditor of disbursements, with headquarters at Chicago, in September, 1920, and to general auditor on March 1, 1930. On February 19, 1941, when the Chicago Great Western completed reorganization, he was appointed comptroller.

Lewis F. Entrikin, assistant general passenger agent of the Pennsylvania, with headquarters at Pittsburgh, Pa., died at his home in Sewickley, Pa., from a heart attack, at the age of 59.

Newman H. Fuller, who retired in 1938 as assistant superintendent on the Chicago, Milwaukee, St. Paul & Pacific at

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Lewistown, Mont., died in Spokane, Wash., on May 17, several days after suffering a stroke. From 1920 to 1924, Mr. Fuller served as division superintendent at Mobridge, S. D., and from 1924 to 1932 as superintendent at Spokane, then being appointed assistant superintendent at Lewistown.

Frank M. Snyder, comptroller of the Central of New Jersey since 1929, with headquarters at Jersey City, N. J., died on June 22 at his home in Westfield, N. J., at the age of 65. Mr. Snyder was born at Jersey City on December 17, 1876, and entered railroad service in April, 1889, as messenger in the telegraph department of the Erie, in which capacity he served until 1891, when he went with the Central of New Jersey as office boy. Mr. Snyder served with the latter road as auditor freight traffic, auditor under federal control, deputy comptroller and comptroller, successively. He was also comptroller of several subsidiary companies and director of the Mount Hope Mineral and the Wharton & Northern.

Earl G. Swanson, assistant to the vice-president in charge of traffic of the Chicago, Burlington & Quincy, with headquarters at Chicago, died on June 22 at St. Joseph's hospital, Aurora, Ill., of pneumonia and other complications, following a heart attack suffered two weeks previously. Mr. Swanson was born at Fulton, Ill., on March 26, 1893, and attended business college. He entered railway service in June, 1911, as a clerk in the store department of the Burlington at Aurora and in February, 1916, he went with the purchasing department of the Chicago, Aurora & Elgin. In July, 1917, he returned to the Burlington as a clerk in the engineering department at Chicago and in January, 1919, he was appointed statistician to the Federal manager, later being appointed statistician in the office of the vice-president in charge of traffic. In January, 1925, Mr. Swanson was promoted to chief clerk in the same office and on June 1, 1936, he was advanced to assistant to the vice-president in charge of traffic, which position he held until his death.

Operating Revenues and Operating Expenses of Class I Steam Railways

Compiled from 133 Monthly Reports of Revenues and Expenses Representing 136 Class I Steam Railways

(Switching and Terminal Companies Not Included)

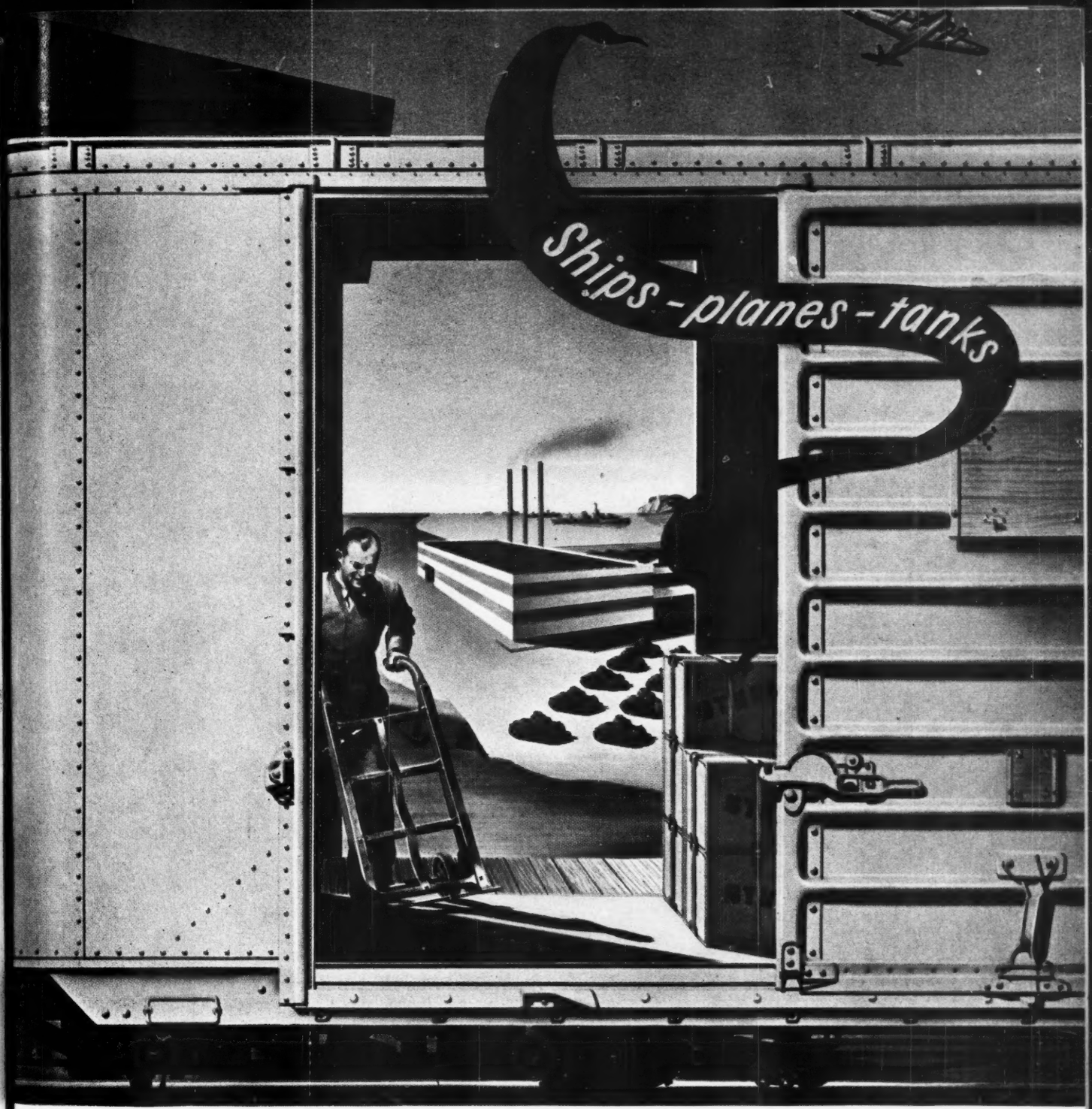
FOR THE MONTH OF APRIL, 1942 AND 1941

Item	United States		Eastern District		Southern District		Western District	
	1942	1941	1942	1941	1942	1941	1942	1941
Miles of road operated at close of month	231,499	232,234	56,896	57,234	43,885	44,180	130,718	130,820
Revenues:								
Freight	$468,006,910	$305,230,456	$201,128,435	$129,770,495	$94,070,681	$51,547,096	$172,807,794	$123,912,865
Passenger	66,116,480	38,348,263	32,276,785	19,669,487	12,843,321	7,528,591	20,996,374	11,150,185
Mail	8,984,044	8,821,838	3,325,440	3,293,931	1,608,768	1,516,978	4,049,836	4,010,929
Express	8,369,828	5,858,564	2,691,605	2,246,019	1,546,490	1,452,691	4,131,733	2,159,854
All other operating revenues	21,054,033	16,749,248	10,210,021	8,221,228	2,729,947	2,132,605	8,114,065	6,395,415
Railway operating revenues	572,531,295	375,008,369	249,632,286	163,201,160	112,799,207	64,177,961	210,099,802	147,629,248
Expenses:								
Maintenance of way and structures	62,369,169	45,461,554	24,889,512	17,286,316	10,633,422	8,229,564	26,846,235	19,945,674
Maintenance of equipment	99,099,276	74,863,857	44,635,652	33,316,138	18,987,325	14,256,212	35,476,299	27,291,507
Traffic	9,781,435	9,188,316	3,535,293	3,189,163	1,894,053	1,760,663	4,352,089	4,238,490
Transportation—Rail line	177,232,760	130,627,155	82,289,953	60,561,857	30,338,820	21,397,300	64,603,987	48,667,998
Transportation—Water line	15,161	522,501	.....	.....	.....	.....	15,161	522,501
Miscellaneous operations	5,383,022	3,499,080	2,166,136	1,524,616	902,507	588,854	2,314,379	1,385,610
General	12,874,869	11,073,839	5,129,559	4,352,618	2,489,855	2,183,754	5,255,455	4,537,467
Transportation for investment—Cr.†	.....	297,931	.....	33,165	.....	72,681	.....	192,085
Railway operating expenses	366,755,692	274,938,371	162,646,105	120,197,543	65,245,982	48,343,666	138,863,605	106,397,162
Net revenue from railway operations	205,775,603	100,069,998	86,986,181	43,003,617	47,553,225	15,834,295	71,236,197	41,232,086
Railway tax accruals	88,592,330	37,040,365	37,091,582	16,334,511	24,507,991	7,448,673	26,992,757	13,257,181
Railway operating income	117,183,273	63,029,633	49,894,599	26,669,106	23,045,234	8,385,622	44,243,440	27,974,905
Equipment rents—Dr. balance	12,153,162	8,169,427	6,260,601	4,231,484	1,045,103	471,787	4,847,458	3,466,156
Joint facility rent—Dr. balance	2,995,672	2,785,466	1,627,810	1,548,971	349,249	321,590	1,018,613	914,905
Net railway operating income	102,034,439	52,074,740	42,006,188	20,888,651	21,650,882	7,592,245	38,377,369	23,593,844
Ratio of expenses to revenues (percent)	64.1	73.3	65.2	73.6	57.8	75.3	66.1	72.1
Depreciation included in operating expenses	20,744,385	17,898,712	9,675,503	7,880,732	3,979,163	3,614,759	7,089,719	6,403,221
Amortization of defense projects	6,293,231	.....	1,947,485	.....	1,693,693	.....	2,656,053	.....
Pay roll taxes	13,717,022	10,357,661	6,058,666	4,574,471	2,425,508	1,775,771	5,232,848	4,007,419
All other taxes	74,875,308	26,682,704	31,032,916	11,760,040	22,082,483	5,672,902	21,759,909	9,249,762

FOR FOUR MONTHS ENDED WITH APRIL, 1942 AND 1941

Miles of road operated at close of month*	231,570	232,347	56,917	57,252	43,897	44,215	130,756	130,880
Revenues:								
Freight	$1,683,839,627	$1,257,589,277	$710,881,823	$551,446,111	$334,703,937	$251,424,579	$638,253,867	$454,718,587
Passenger	235,665,536	155,048,020	114,567,467	78,884,699	45,657,438	30,380,035	75,440,631	45,783,286
Mail	35,079,784	34,076,490	12,789,949	12,718,329	6,234,821	5,973,132	16,055,014	15,385,029
Express	25,813,002	18,143,738	8,864,114	6,997,489	4,704,292	4,213,144	12,244,596	6,933,105
All other operating revenues	75,610,743	62,257,695	36,588,238	31,087,458	10,181,305	8,411,361	28,841,200	22,758,876
Railway operating revenues	2,056,008,692	1,527,115,220	883,691,591	681,134,086	401,481,793	300,402,251	770,835,308	545,578,883
Expenses:								
Maintenance of way and structures	214,244,518	159,512,524	86,606,350	64,614,097	40,883,379	31,306,895	86,754,789	63,591,532
Maintenance of equipment	381,559,525	298,916,128	174,823,886	138,642,925	71,951,145	56,453,945	134,784,494	103,819,258
Traffic	38,642,461	35,883,113	13,933,525	12,649,982	7,791,949	7,211,620	16,916,987	16,021,511
Transportation—Rail line	697,379,926	529,318,843	322,276,088	245,990,442	118,601,856	91,311,297	256,501,982	192,017,104
Transportation—Water line	62,516	2,195,382	.....	.....	.....	.....	62,516	2,195,382
Miscellaneous operations	20,305,980	13,996,078	8,354,784	6,055,373	3,455,147	2,461,718	8,496,049	5,478,987
General	51,147,564	43,871,983	20,552,013	17,368,651	9,835,396	8,621,727	20,760,155	17,881,605
Transportation for investment—Cr.†	.....	868,062	.....	122,031	.....	230,270	.....	515,761
Railway operating expenses	1,403,342,490	1,082,825,989	626,546,646	485,199,439	252,518,872	197,136,932	524,276,972	400,489,618
Net revenue from railway operations	652,666,202	444,289,231	257,144,945	195,934,647	148,962,921	103,265,319	246,558,336	145,089,265
Railway tax accruals	276,132,084	149,495,982	114,669,439	65,631,931	69,689,231	35,549,707	91,773,414	48,314,344
Railway operating income	376,534,118	294,793,249	142,475,506	130,302,716	79,273,690	67,715,612	154,784,922	96,774,921
Equipment rents—Dr. balance	39,788,730	31,444,204	19,938,296	15,559,106	1,941,270	1,633,198	17,909,164	14,251,900
Joint facility rent—Dr. balance	11,995,559	10,947,594	6,403,157	6,004,500	1,299,577	1,152,041	4,292,825	3,791,053
Net railway operating income	324,749,829	252,401,451	116,134,053	108,739,110	76,032,843	64,930,373	132,582,933	78,731,968
Ratio of expenses to revenues (percent)	68.3	70.9	70.9	71.2	62.9	65.6	68.0	73.4
Depreciation included in operating expenses	77,029,721	71,127,468	34,686,698	31,232,765	16,018,706	14,377,154	26,324,317	25,517,549
Amortization of defense projects	19,663,447	.....	6,774,644	.....	4,796,374	.....	8,092,429	.....
Pay roll taxes	53,023,405	40,352,347	23,476,213	17,978,655	9,397,329	7,188,202	20,149,863	15,185,490
All other taxes	223,108,679	109,143,635	91,193,226	47,653,276	60,291,902	28,361,505	71,623,551	33,128,854

* Represents an average of the mileage reported at the close of each month within the period.
† General Account VIII. Transportation for Investment—Cr. canceled effective January 1, 1942.



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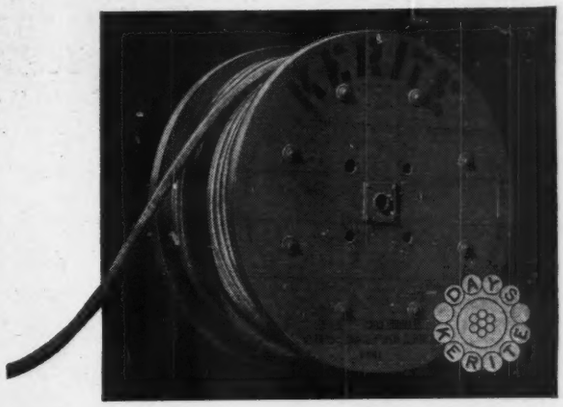

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